QUALITATIVE AND QUANTITATIVE ANALYSIS OF DANONE

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PART 1

QUALITATIVE ANALYSIS
OF DANONE
This project consists on analysing the business structure of DANONE, one of the largest yogurt and other dairy products in the world. In the first part of this paper, we study which is the main activity of the company and how through which brands the develop it. We also pay attention to the main stakeholders of the company, suppliers and customers for example. Furthermore, we also take a look to the financial and ownership structure of the firm.
INTRODUCTION

DANONE is the result of a merge between Isaac Carrasco’s company, Danone, created in Barcelona in 1919 and Boussois-Souchon-Neuvesel (BSN), a French glass manufacturer venture created by Antoine Riboud in 1966.

After the merge, in 1973, the BSN group focused their activities on food, primarily in Western Europe, including the acquisition of breweries of other countries (Spain, Belgium, Italy), the leading producer of yogurts in USA (Dannon) and other food companies and subsidiaries that let them to become one of the largest diversified companies in Europe.

In the 1990s, they consolidate their position in the market, launching new products and growing into new markets. They acquired new companies and made joint-ventures in order to expand internationally to the Asia-Pacific region, Latin America and Eastern Europe.

The company changed in 1999 their corporation name from “BSN” to “Groupe Danone” (since 2009, just DANONE) and from 2000 on, they sold all their beer companies and, later they also left some activities like sauces and cereals in order to focus on more healthy production.

In 2007 the group bought Numico, which enabled it to add the Baby Nutrition and Medical Nutrition business lines to its portfolio. Later in 2010, they also acquired Unimilk group’s companies, making it the leader for dairy products in Russia and the CIS area.
DANONE’s main activities

Nowadays, DANONE focuses its mission on “bringing health through food to as many people as possible. In order to achieve their aim, they develop their activities through 4 Divisions:

1 Fresh Dairy Products

The Fresh Dairy Products Division produces and markets yogurts, fermented fresh dairy products and other specialized fresh dairy products. The Division’s strategy consists of developing consumption of these products in all regions around the world.

The main products of the division include:
- **Activia**, present in 72 countries, for more than 20 years,
- **Actimel**, on the market for more than 20 years,
- brands aimed at the children and pre-adolescent target, such as **Danonino**, present in more than 50 countries under different brand names (Fruchtswere, Danoninho and Petit Gervais), or functional brands such as **Danacol** and **Densia**.

2 Waters

The Waters Division comprises the natural waters business along with flavored and vitamin-enriched waters:

the main international brands include **Evian**, **Volvic** (France, Germany, United Kingdom, Japan), **Bonafont** (Mexico, Brazil and, recently, Poland), and **Mizone** (China, Indonesia);
the main local brands include Fontvella and Lanjarón in Spain, Villavicencio and Villa del Sur in Argentina, Aqua in Indonesia and Zywiec Zdroj in Poland.

3 Baby Nutrition

Focuses on specialized foods for infants and toddlers and are concentrated mainly in European countries such as France, Italy and Poland. China and Indonesia are priority markets and the Group currently ranks as the number one in terms of sales.

4 Medical Nutrition

The Medical Nutrition Division focuses mainly on patients, infants afflicted with certain illnesses and frail elderly people. The Division’s products are designed primarily to treat disease-related malnutrition by satisfying special food needs. These products - most of which are eligible for insurance reimbursement - are prescribed by healthcare professionals.

The main Brand, Nutricia, includes 3 sub-brands focused to different target of customers:

Worldwide Ranking
#1 fresh dairy products
#3 packaged water
#2 baby nutrition
• Fortimel/Fortisip: liquid oral nutritional supplements, with the most concentrated versions recently introduced in some of the Division’s largest markets (United Kingdom, France, Spain, etc.);

• Neocate: hypoallergenic products aimed at infants and children with lactose or multiple food protein intolerance or allergy-related troubles;

• Fortifit: supplements for people suffering from sarcopenia, an illness marked by degenerative loss of skeletal muscle mass linked to aging.

DIVISIONS AND FIGURES

Each Division has a global management unit, to which the dedicated local entities report. In total figures, the Fresh Dairy Products provided DANONE the 58% of Group sales in 2011. The Waters Division and Baby Nutrition represented 17% and 19% respectively. Finally, the Medical Nutrition division accounted for 6% of total sales.

The Group is present in all regions of the world:

• Europe, including Russia, the other CIS countries and Turkey, accounted for 56% of Group sales in 2011, spread across all four Divisions. The leading countries in this region are France, Russia, Spain, Germany and the United Kingdom;
• Asia represented 15% of Group sales in 2011, notably in China and Indonesia in the Waters and Baby Nutrition Divisions;

• the Rest of the World, which includes the activities in North America, Latin America, Africa and the Middle East, accounted for 29% of Group sales in 2011:
  - United States is the leading country in this region thanks to the robust activity in the Fresh Dairy Products Division;
  - Mexico, Argentina and Brazil are the main contributors in Latin America for all four Divisions;
  - in the regions of Africa and the Middle East, South Africa and Saudi Arabia are the largest markets, focused entirely on the Fresh Dairy Products.

VALUE CREATION

The Group’s strategy increasingly relies on the upstream segment of its activity (its natural resources, operations and the environment), not just to manage costs but also to make it a genuine mechanism for creating value and standing apart from the competition.

WORKFORCE

Notice that Danone has a total of 186 plants around the world where it exploits its different products. Depending on the market share and the profitability of each division, Danone allocates a higher number of plants to produce the product.
PROVIDERS

For the preparation of dairy milk products, it uses milk which comes from areas near their factories. This get the freshness and optimum quality milk to produce their products. The daily work of farmers and technical teams ensure that the milk meets the strictest quality and food security.

Danone has a total of 101,995 workers worldwide. They are divided between the four fields the company works on and obviously, a small part (1,223), that carry out the activities of management and business administration.

Dairy Fresh products and waters are the areas which concentrates a greater number of workers: 47,887 and 35,067 respectively since those are the most profitable divisions for the company. Moreover, the baby nutrition division has 11,411 employees and 5,298 the medical nutrition one.
Danone establishes a relationship of over 20 years with many of the cattlemen. They work with more than 600 farmers in Spain which are divided into five areas which the main Livestocks are:

1) **Northeast zone**: Can Turró and Lactics Foix, Barcelona. Pedro Iraizoz and Echerquie, Navarra
2) **Northwest zone**: Capón and Rielo, Galicia.
3) **Center zone**: Gala Merino Livestock (Escalona del Prado, Segovia)
4) **Levant zone**: Serretilla Ganadería, San Ramón, Sat More, Vaquería Hermanos Plaza, Valencia.
5) **South zone**: Arenas de Rota Livestock (Rota, Cadiz) and El Pinar, Sevilla.

Furthermore, Danone has also created a Supplier Portal, whose main purpose is to automate processes online prior to acceptance to the basic requirements for both new suppliers and existing suppliers Danone SA.
In addition, this year Danone has launched The Supplier Awards, born with the aim of recognizing the contribution of its suppliers and farmers to the success of the company. The program is a recognition and livestock suppliers who achieve excellence in their efforts when working with us.

![Supplier Awards Danone](image)

**CUSTOMERS**

Although the end customers of the Group’s products are the individual consumers, the Group generates a substantial portion of its sales through major retail chains. This retail sector has become increasingly concentrated over the past several years.

The Group has undertaken several initiatives to work closely with its distributors to help develop the sales of its products:

- It establishes global partnerships with its leading distributors. These partnerships are focused mainly on logistics collaboration and food safety management.

- The Group has taken several initiatives to work closely with its large retailers in order to accelerate the development of its product categories and to optimize the flow of goods and the inventory levels of its customers. These include the Efficient Consumer Response (ECR) approach, automatic inventory replenishments and just-in-time delivery. The Group also works with its customers to develop specific marketing activities such as joint promotions.

- In recent years, some European retail chains have expanded rapidly internationally, enabling the Group to accelerate its own geographic expansion as well as the international development of its brands.
In the baby nutrition market, customers also include major retail chains as well as pharmacies, hospitals and clinics.

In the medical nutrition market, the Group works closely with local and regional regulatory authorities, doctors, scientists, hospitals, clinics and pharmacies.

**DISTRIBUTION**

**Fresh Dairy Products and Waters**

The Group’s distribution models reflect two main approaches: distribution aimed at major retail chains on the one hand and distribution to traditional commercial points of sale on the other. However, an important fact is that they vary to reflect local specificities.

In emerging countries, particularly in Asia, Latin America and Eastern Europe, a large portion of Danone’s sales is generated through traditional market outlets thanks to small-scale point of sale networks. In countries where traditional commerce and independent supermarkets continue to account for a significant share of food sales, an in-house sales force and exclusivity agreements with wholesalers represent a competitive advantage for the Group. Moreover, in Latin America and Asia, a significant portion of the Waters Division’s products is directly distributed to consumers. The Group is constantly streamlining its logistics flows in order to improve service quality while reducing costs.

**Baby Nutrition and Medical Nutrition**

In the baby nutrition and medical nutrition markets, products are marketed through hospitals, clinics and pharmacies. The Baby Nutrition Division also markets its products through large retail chains. Medical visitors meet with general practitioners and specialists (pediatricians, nutritionists, etc.), as well as with pharmacists.
MARKETING

One of the key factors in the Group’s strategy is the advertising and promotional policies. The strategy is based on innovation, brand recognition and market leadership. Danone’s operating companies in each Division and regional market are all supported by common foundations defined by dedicated central organizations. Furthermore, each Division is responsible for their own advertising, promotional and sales strategies, adapted to local consumption patterns.

COMPETITION

The Group’s competitors in its respective business lines include:

(i) large multinational food and beverage corporations such as Nestlé, PepsiCo, Coca-Cola, Unilever

(ii) large corporations in the medical nutrition and baby nutrition segments such as Abbott, Mead Johnson, Fresenius.

(iii) smaller companies specializing in certain product lines or markets

(iv) retail chains offering generic or private label products.
EXECUTIVE COMMITTEE

Under the authority of Mr. Franck Riboud, the Executive Committee is responsible for the Group’s operational management. It implements the strategy defined by the Board of Directors, approves budgets, ensures the consistency of actions undertaken by each of the subsidiaries and Divisions and, depending on the results achieved, decides on action plans to be implemented. The Executive Committee meets at least once a month.

The duration of Directors’ terms of office is three years, and may be renewed. The term of office of any Director who is an individual expires automatically at the conclusion of the Shareholders’ General Meeting that votes on the previous year’s financial statements and that is held in the year during which such Director has turned or will turn 70.

As of February 29, 2012, the Executive Committee would include the following members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Principal occupation (1)</th>
<th>Start date of Director’s term</th>
<th>End date of term (date of Shareholders’ General Meeting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franck RIBOUD</td>
<td>56</td>
<td>Chairman and Chief Executive Officer of Danone</td>
<td>1992</td>
<td>2013</td>
</tr>
<tr>
<td>Emmanuel FABER</td>
<td>48</td>
<td>Vice-Chairman of the Board of Directors and Deputy General Manager of Danone</td>
<td>2002</td>
<td>2013</td>
</tr>
<tr>
<td>Bernard HOURIS</td>
<td>55</td>
<td>Vice-Chairman of the Board of Directors and Deputy General Manager of Danone</td>
<td>2005</td>
<td>2014</td>
</tr>
<tr>
<td>Bruno BONNELL (2)</td>
<td>53</td>
<td>Chairman of Soroob SAS</td>
<td>2002</td>
<td>2014</td>
</tr>
<tr>
<td>Richard GOBLET D’ALVIETTA (2)</td>
<td>63</td>
<td>Executive Chairman of Saffia SA</td>
<td>2003</td>
<td>2015</td>
</tr>
<tr>
<td>Yoshiko KAWABATA</td>
<td>53</td>
<td>Senior Managing Director – Head of the International Affairs department and manager of the Management Support division of Yakuiz Precision Co., Ltd.</td>
<td>2010</td>
<td>2014</td>
</tr>
<tr>
<td>Jean LAURENT (2)</td>
<td>67</td>
<td>Chairman of the Board of Directors of Foncière des Régions</td>
<td>2005</td>
<td>2015</td>
</tr>
<tr>
<td>Benoît POTIER (2)</td>
<td>54</td>
<td>Chairman and Chief Executive Officer of Air Liquide SA</td>
<td>2003</td>
<td>2013</td>
</tr>
<tr>
<td>Isabelle SELLES</td>
<td>52</td>
<td>Chairman of J.P. Morgan, France</td>
<td>2011</td>
<td>2014</td>
</tr>
<tr>
<td>Jean-Michel SEVERIN (2)</td>
<td>54</td>
<td>Managing Partner, “Investisseur and”</td>
<td>2011</td>
<td>2014</td>
</tr>
</tbody>
</table>
It would also include an honorary member, who has an advisory role: Mr. Michel David-Weill, who was appointed Honorary Vice-Chairman of the Board of Directors at the conclusion of the Shareholders’ General Meeting of April 28, 2011.

The Board also acknowledged the fact that the terms of office as Director of Messrs. Christian Laubie and Hakan Mogren and Mrs. Guylaine Saucier were not to be renewed.

OWNERSHIP STRUCTURE

Here we can see the more important shareholders of the Danone Group dated December 31, 2011:

As of December 31, 2011, the total number of shares owned by the members of the Board of Directors and Executive Committee (25 persons) was 428,102 shares, representing 0.07% of the Company’s share capital.

As of December 31, 2011, under the authorizations granted by the Shareholders’ General Meeting of April 28, 2011 and prior authorizations, the Group owned, directly and through
Danone SA, its Spanish subsidiary, 41,605,465 shares of the Company, representing 6.48% of its share capital.

<table>
<thead>
<tr>
<th>Institutional investors</th>
<th>As percentage of share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>24%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10%</td>
</tr>
<tr>
<td>Germany</td>
<td>6%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>3%</td>
</tr>
<tr>
<td>Rest of Europe</td>
<td>0%</td>
</tr>
<tr>
<td>United States</td>
<td>12%</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>0%</td>
</tr>
<tr>
<td>Individual shareholders and &quot;Danone company investment fund&quot;</td>
<td>17%</td>
</tr>
<tr>
<td>Shares held by the Company and its subsidiaries</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

There are some remarkable facts between the relation of the shareholders and the executive committee. After a little research we found out that most of the members of the board directors are currently working as directors in other firms, or institutions, as for example the Bank of Montreal, which happens to be one of the shareholders of the firm, the Eurazeo Group, Banca Leonardo...

The shareholders need to know what are the main objectives, issues, and many more matters of interest of the firm, so the best way to stay informed, or even, to control which are the next steps of the firm, is to introduce as a member of the executive committee someone close to them, to provide them the information they need or to guide the company the roads desired.

**CORPORATE SOCIAL RESPONSIBILITY**

To understand Danone’s Corporate Social Responsibility (from now on CSR), we have to take into account the year 2006. That year, marked a key stage with the formalization of Danone’s mission: “Bringing health through food to as many people as possible”. This mission requires that the Company take concrete steps with regard to the major challenges facing society today. Here are the main ones:

- Social challenges: employment, increased employability and professional skills...
- Challenges linked to products and consumers: taking nutrition and food into account as basic elements in public health policies
• Environmental challenges

To achieve those challenges and grow in accordance with the mission Danone decided to focus on four key areas to ensure sustained and responsible growth:

• Health: strengthening of the Group’s capacity to deliver relevant benefits with respect to nutrition and health challenges;
• For All: establishment of new economic models to bring high-quality nutritional solutions to populations with limited purchasing power in a growing number of countries;
• Nature: faster recognition of environmental impacts through reductions in the Group’s carbon footprint and water consumption;
• People: transformation of the Company as a place for the development of all employees and promoting their commitment to socially responsible programs.

RESEARCH AND DEVELOPMENT

Danone regularly conducts research in collaboration with external entities such as universities and specialized public research centers. The Group benefits from the expertise of external scientific committees on strategic themes (such as probiotics or water) and its health brands. This ongoing dialogue with scientists and research support are two of the commitments made by the Group in its Food, Nutrition and Health Charter.

As part of its contribution to nutritional research, 18 Danone Institutes (non-profit organizations) around the world have been created to help further understanding of the links between food, nutrition and health. The Danone Institutes bring together independent experts (researchers, doctors, dieticians) covering all areas of food and nutrition (biology, medicine, and human sciences, such as psychology and sociology).

The mission of Danone’s Research and Development activities is divided into 3 parts:

• Develop products offering specific benefits and targeted to optimize people’s health capital and quality of life.
• Improve dietary practices and promote better food for all.
• Adapt its products to the local needs and typical use.
In order to develop this paper we have used the following sources:

- Danone ESPAÑA website  
  http://www.danone.es

- Danone Shareholder’s website  
  http://finance.danone.com/

- Wikipedia’s article of Groupe Danone  
  http://en.wikipedia.org/wiki/Groupe_Danone

- 2011 Annual Financial Report  

- 2010 Annual Financial Report  

- Groupe Danone’s 2011 Corporate website  
  http://danone11.danone.com

- AMADEUS software
PART 2

RISK AND PROFITABILITY ANALYSIS
RISK ANALYSIS

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2.1 STOCK MARKET EVOLUTION

The first part of the project consists on analyzing the evolution of Danone in the stock market. Our company is part of the Eurostoxx50 market, for that reason we are going to compare it with the evolution of the Stoxx index. Since in the first part of the project, we focused our analysis on the period 2008-2011, the current analysis will study the same date.

To start with the analysis, we have obtained data from Eleconomista.es and Invertia.com. We choose the data from the column ‘Diferencia%’ because we are interested in the variation in % from one figure to another. Notice that, since there were not all figures available, we have only selected those days in which we have information both in Danone and Eurostoxx.

We work out the following statistics:

<table>
<thead>
<tr>
<th>Danone</th>
<th>Eurostoxx</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dif (%)</strong></td>
<td><strong>Dif (%)</strong></td>
</tr>
<tr>
<td>MEDIA</td>
<td>MEDIA</td>
</tr>
<tr>
<td>-0,0636%</td>
<td>-0,0498%</td>
</tr>
<tr>
<td><strong>VARIANZA</strong></td>
<td><strong>VARIANZA</strong></td>
</tr>
<tr>
<td>0,0002907</td>
<td>0,00037684</td>
</tr>
<tr>
<td><strong>DESV TIPICA</strong></td>
<td><strong>DESV TIPICA</strong></td>
</tr>
<tr>
<td>0,01704982</td>
<td>0,01941235</td>
</tr>
<tr>
<td><strong>COEF VAR</strong></td>
<td><strong>COEF VAR</strong></td>
</tr>
<tr>
<td>-26,7886811</td>
<td>-38,9834981</td>
</tr>
<tr>
<td><strong>RANK</strong></td>
<td><strong>RANK</strong></td>
</tr>
<tr>
<td>16,6%</td>
<td>18,9%</td>
</tr>
<tr>
<td>max</td>
<td>max</td>
</tr>
<tr>
<td>8,50%</td>
<td>11,00%</td>
</tr>
<tr>
<td>min</td>
<td>min</td>
</tr>
<tr>
<td>-8,20%</td>
<td>-7,90%</td>
</tr>
</tbody>
</table>

Interés Anual:
- Danone: 0,79264448
- Eurostoxx: 0,8337665
As said before, the results above belong to the period 2008-2011. If we take a look to the variation coefficient (Coef. Var.), we can conclude that during that period, the volatility in the Eurostoxx market was higher. Another way to measure it is to look at the maximum and minimum values in the period. Whereas in Danone the highest value we obtain is 8.60%, in the Eurostoxx index we get 11%. On the contrary, if we compare the minimum values, we see that the minimum in Danone is bigger than the minimum in Eurostoxx. We will explain later the reason.

We can conclude that, since Eurostoxx has more volatility (you can win more, but you can also lose more), the annual interest you obtain is higher than in Danone. We can have a look to the following graph to understand the previous explanation.

![Evolution in the stock market of Eurostoxx and Danone, 2008-2011](image)

The red line represents the evolution of the Eurostoxx index and the blue one represents Danone. We can observe that during almost the whole period, the Eurostoxx index is always over/under the Danone evolution. In other ways, it has more volatility.
However, there is a period, between april-september 2008 in which the volatility in Danone is higher than in Eurostoxx. If we focus on that period, we obtain the following results and graph:

As explained before, from April to September 2008, the volatility in Danone is higher than in the Eurostoxx market.
In the period we make reference to, the variation coefficient is bigger in Danone, what explains its higher volatility. In this period is included the minimum value of Danone, -8.20%. Since the volatility is higher, we can also expect a higher annual interest in Danone than in the Eurostoxx.

Finally, we are interested to know the Beta coefficient. To work out it, we use the excel formula =ESTIMACION.LINEAL considering Danone the endogenous variable (Y) and the Eurostoxx market the exogenous variable (X).

The result for Beta is **0.096526**.

Beta is a measure of relative stock volatility (risk). If a share price moves exactly in line with the market, then the stock's beta is 1. A stock with a beta of **0.096** would rise by 0.96% if the market rose by 10%, and fall by 0.96% if the market fell by 10%.
2.2 SHORT TERM RISK ANALYSIS

2.2.1 Solvency analysis.

The solvency ratio is a financial ratio that measures whether or not a firm has enough resources to pay its debts over the next 12 months. It compares a firm's current assets to its current liabilities. The ratios for the period 2011-2008 are:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvency Ratio</td>
<td>0,8779</td>
<td>0,8195</td>
<td>0,7525</td>
<td>0,9969</td>
</tr>
</tbody>
</table>

Low values for the solvency ratios (values less than 1) indicate that a firm may have difficulty meeting current obligations. Low values, however, do not indicate a critical problem. If an organization has good long-term prospects, it may be able to borrow against those prospects to meet current obligations. Some types of businesses usually operate with a current ratio less than one, this is the case of our company.

2.2.2 Liquidity analysis.

When analyzing the liquidity of Danone, we study the cash cycle, that explains the amount of time needed to collect receivables and the length of time the company is afforded to pay its bills without incurring penalties.

We need to work out the Average Payment Period (APP) and the Average Collection Period (ACP).

\[
\text{APP: } \frac{\text{Payables at start of year} \times 365}{\text{Annual COGS}}
\]

\[
\text{ACP: } \frac{\text{Receivables at start of year} \times 365}{\text{Annual Sales}}
\]
The cash cycle will be the difference between APP - APC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>APP (Average Payment Period)</td>
<td>37,4</td>
<td>41,2</td>
<td>40,97</td>
<td>36,7</td>
</tr>
<tr>
<td>APC (Average Period Cash)</td>
<td>50,357</td>
<td>51,018</td>
<td>46,922</td>
<td>51,777</td>
</tr>
<tr>
<td>Cash cycle (APP - APC)</td>
<td>-12,9</td>
<td>-9,7</td>
<td>-5,9</td>
<td>-14,9</td>
</tr>
</tbody>
</table>

Analyzing both the solvency and liquidity ratios, we obtain the graph above. As the figures indicate, the solvency ratio is negative. That is due to the fact that the working capital during the period analyzed is negative, that is, that current liabilities are bigger
that current assets. Although the result of the ratio is almost 1 (in fact, in 2008 it is 1) and we do not consider it as a very risky situation, the company should be on alert: if there is any problem that makes stop production, the company won’t have enough current assets to pay the short-term debt.

On the other hand, when studying the cash cycle, a negative result is obtained. For example, in year 2011, the cash cycle is -12. That result means that we pay 12 days before we get receivables from our debtors. In general, despite of having negative results, they are not too negative, and although we are not in a very good position, we can not consider there is big danger. There is little risk.
2.3 LONG TERM RISK ANALYSIS

Leverage ratio:

\[
\frac{\text{Assets}}{\text{Equity}} = \frac{\text{Equity}}{\text{Equity}} \times \frac{\text{Liabilities}}{\text{Equity}} = 1 + \frac{\text{Liabilities}}{\text{Equity}}
\]

<table>
<thead>
<tr>
<th>Years</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage ratio</td>
<td>2.3492562</td>
<td>2.38732214</td>
<td>2.30288963</td>
<td>3.10793614</td>
</tr>
</tbody>
</table>

As we can see, the leverage ratio is always higher than 1. It means that the company has an external resource which contributes to finance the company assets because they are bigger than the total equity of the company. However, we can conclude that the company has reduced its debt (from 3.10 to 2.34) and as a consequence, they has reduced the long term risk.

Equity evolution:

<table>
<thead>
<tr>
<th>Years</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQUITY</td>
<td>12.100.000</td>
<td>11.737.000</td>
<td>10.555.000</td>
<td>8.644.000</td>
</tr>
<tr>
<td>capital</td>
<td>161.000</td>
<td>162.000</td>
<td>162.000</td>
<td>162.000</td>
</tr>
<tr>
<td>Other shareholder funds</td>
<td>11.939.000</td>
<td>11.575.000</td>
<td>10.393.000</td>
<td>8.516.000</td>
</tr>
</tbody>
</table>

*units: thousand of Euros.

As we can see, the equity is constantly increasing. This is because each year, the reserves have increased instead of the capital of the company, which is constant except in year 2011, where the company decides to reduce its capital by 1000 million.

The reduction in the equity its attributable to different points:

1) the change in the number of DANONE shares in issue:
During the fiscal year 2011, the Group carried out the following transactions in DANONE shares:

- the buyback of 13.3 million of DANONE shares, mainly for the purpose of acquisitions and, to a lesser extent, to hedge the stock-options and Group performance shares granted to certain employees and corporate officers
- the acquisition of 6.6 million DANONE call options to hedge part of the ongoing stock-option plans granted to certain employees and corporate officers, as a replacement for their existing hedging by treasury shares.

These transactions resulted in a €348 million reduction under the heading Treasury shares attributable to owners of the Company in consolidated equity.

2) dividend payments to DANONE shareholders, which increase to 1.30€/share

3) transactions with non-controlling interests:

   With the acquisition of Unimilk group’s the transaction’s definitive impact on equity as a total reduction to €349 million.

4) other gains and losses recognized directly in equity for an amount of 1 million.

### Liabilities evolution:

<table>
<thead>
<tr>
<th>Years</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIABILITIES</td>
<td>16,326,000</td>
<td>16,283,000</td>
<td>13,752,000</td>
<td>18,221,000</td>
</tr>
</tbody>
</table>

The Danone liabilities, in year 2009 had a considerable decreasing due to a capital increase, which enabled Danone to reduce its debt from 2008 to 2009. The net debt of the total shareholders’ equity (including the liabilities related with put options granted to minority shareholders) was reduced to 49.3% in 2009 compared to 127.1% in 2008,
because of the capital increase in 2009, which means an increase in the Company’s capital too.

As of December 31, 2010, the Company’s net debt increased during the 2010 fiscal year due mainly to increases in short-term loan from Danone Finance. The same history is repeated for 2011, where the liabilities increased due to a short term loan from Danone Finance and commercial paper. However, the result is a reduction of the liabilities from 18.221.000 € to 16.326.000 € so Danone has decreased their long term risk.
2.4 RISK IDENTIFICATION AND MANAGEMENT.

Danone maintains an active risk management policy aimed at protecting and developing its assets and reputation and protecting the interests of its shareholders, employees, consumers, customers, suppliers, the environment and its other stakeholders.

Since 2002, the Group has implemented a global risk identification and management system that prioritizes challenges in terms of their probability of occurrence and their estimated impact on the Group. It uses a special risk mapping methodology called "Vestalis".

In the entities that use it, this mapping is designed to identify the risks related to the various processes and activities, to prioritize them at the local level and to consolidate and contextualize them at the regional or Division levels. This mapping then leads to the definition of key risk mitigation actions through preventive measures or through the establishment of crisis management plans.

The main risks that Danone has are presented below by thematic category.

Operational risks related to the Group's business sectors:

I. Risks associated with the volatility of prices and the availability of raw materials:

The Group’s principal raw material needs consist primarily of:
• materials needed to produce Danone’s food and beverage products, primarily milk and fruits (“food raw materials”);
• materials needed for packaging its products, primarily plastics and cardboard (“packaging”).

Energy supplies represent a limited portion of the Group’s purchases. A potential increase in their prices may not be passed on, either in full or in part, in the sales price of the Group’s products and could have in any event a significant adverse effect on the Group’s activities and on its results.

The price trends of major raw materials may have a significant impact on the volatility of the Group’s earnings. In that context, the Group manages cost inflation of raw materials through the following measures, ranked in order of importance:
• purchases made locally whenever possible, as local markets are often less volatile;
• establishment of a purchasing policy ("Market Risk Management") that consists of defining rules for securing the physical supply and price setting with suppliers and/or on financial markets when they exist. The monitoring of exposures and of the implementation of this policy is made at the level of each raw materials category by the Group’s central purchasing staff. The buyers typically negotiate forward purchase
agreements with suppliers, since no financial markets exist that would allow efficient hedge of the volatility of the Group’s main raw materials purchase prices;
• productivity improvements and production cost reductions, for example by streamlining packaging;
• optimization of fixed costs through concentration and increased volumes;
• depending on the markets and products, sales price adjustments while maintaining the Group’s competitive position.

II. Risks associated with the concentration of distribution and the default of a customer

While the end customers of Danone products are individual consumers, the Group sells its products mainly to major retail and grocery chains. Overall, the distribution market has become increasingly concentrated. A continuation of the movement to concentrate distribution would result in a smaller number of customers and could lead to retailers demanding price cuts and further promotions. This could affect the Group’s operating margin, change its market shares and/or represent a counterparty risk in the event of a default by a major customer, and consequently have a significant adverse effect on the Group’s activities and results.

In some countries, certain subsidiaries of the Baby Nutrition and Medical Nutrition Divisions have commercial relations with public and quasi-public organizations, health insurance and supplementary health insurance companies, as well as hospitals, whose default risk is relatively limited but which sometimes make payments only after lengthy time periods. It is possible that some of these organizations would collaborate and issue joint requests for proposals, which could put pressure on the earnings of the respective Divisions.

The Group manages this risk mainly through an action program focused on the large key accounts and Credit Committees or equivalents in Danone subsidiaries. Moreover, the Group’s exposure to unpaid trade receivables not yet the object of a provision is limited.

III. Risks associated with competition

The Group conducts its business in highly competitive markets that include large multinational companies and numerous local players of different sizes. In addition, certain retail and grocery chains, having developed their own brands, could reduce the shelf space occupied by the Group’s products in favor of their own products. The Group is thus facing national and international competition which could lead it to reduce its prices to defend its market shares, which could have a significant adverse effect on the Group’s results.
To enable it to compete effectively with the main operators in these markets, the Group has decided to differentiate itself from its competitors in terms of its product range, quality/price ratio and positioning. This strategy enables Danone to develop a long-lasting, balanced and constructive relationship with the major distribution networks by supplying leading products that generate growth and profitability for both parties.

**Operational risks specific to the Group’s activity and organization**

I. Risks associated with the concentration of purchases of some products and services from a limited number of suppliers:

In connection with its policy of optimizing its purchasing, the Group centralizes the purchase of certain goods (in particular raw materials such as the ferments used in the Fresh Dairy Products Division or powdered milk for the Baby Nutrition Division in some Asian countries) and certain services (in particular sub-contracted services or information technology services) from a restricted number of rigorously selected suppliers. If some of these suppliers were not able to provide the Group with the quantities and qualities of products or goods specified that the Group needs under the conditions set forth, or if the suppliers are not able to provide services in the required time period, the Group’s activities and results could be materially adversely affected. Great care is given to the initial selection and subsequent monitoring of such key suppliers. Measures are taken to safeguard these supplies and services including the development of business continuity plans that include the identification of backup suppliers.

IV. Risks associated with an unfavorable change in business activity forecasts and its impact on impairment testing of assets:

In connection with Group’s acquisitions a significant amount of the acquisition price can be allocated to goodwill and to acquired brands with an indefinite useful life. In particular, a significant amount of the purchase price was allocated to goodwill and to acquired brands with an indefinite useful life, in connection with Numico acquisition in 2007, and to a lesser extent, in connection with Unimilk group’s companies acquisition in 2010.

An unfavorable change in business activity forecasts and assumptions used in the projection of cash flows for the purpose of the impairment tests, in particular with respect to goodwill and to the Numico brands, could result in the recognition of impairment charges. These charges could then have significant adverse effects on the Group’s results.
Risk management: the Group draws up assumptions and business activity forecasts and, when deemed necessary, a customized action plan

V. Risks associated with the Group’s products:

Due to the nature of its activity, Danone is exposed to the risk, whether proven or merely alleged, of product contamination or that its products are harmful which, in addition to the immediate financial impact, could also have an adverse impact on the Group’s reputation and sales.

Contamination risk: For all Group products, in particular fresh dairy products, application of appropriate conditions of storage is vital in order to retain their flavor and nutritional value and to avoid subsequent contamination or deterioration. For this reason, partnerships with scientific organizations of international standing and the implementation of zero-tolerance quality management and food safety policies enable the Group to achieve the expected level of quality and food safety.

In terms of financial risks, the most important ones according to DANONE’S Annual Report are the following ones:

- **Currency Risk**

Due to its international presence, the Group could be exposed to foreign exchange rate fluctuations in the three following situations:

- in relation to its operating activities: the sales and operating expenses of the subsidiaries of the Fresh Dairy Products Division and most of the subsidiaries of the Group’s Waters Division are expressed primarily in their country’s domestic currency. Certain imports (especially raw materials and finished goods) and exports are, however, expressed in other currencies.

- in relation to its financing activities: in application of its risk centralization policy, the Group manages multi-currency financings and liquidities;

- when translating into euros the financial statements of subsidiaries denominated in a foreign currency:

In order to avoid all this risks, the group has used hedges for the financial exchange rate and also for the operational exchange rate. Thanks to the use of hedges, the risk exposure for the Group was reduced significantly during the last fiscal year.
• **Financing and liquidity risk.**

The Group does not use indebtedness in either a recurring or a significant way in connection with its operating activities. Operating cash flows are generally sufficient to self-finance the Group’s business operations and organic growth.

The Group may, however, in the future, increase its indebtedness to finance acquisitions or as and when required to manage its cash cycle, particularly when dividends are paid to the Company’s shareholders.

Its goal remains to maintain debt at a level enabling it to retain flexibility with respect to its financing sources.

The Group manages its exposure to refinancing risk by:

- centralizing its financing source.
- borrowing from diversified financing sources.
- arranging a significant portion of its financing as medium term financing.
- maintaining financing sources available at any time.
- ensuring that it is not subject to any covenant relative to maintaining financial ratios in connection with financing contracts.

These rules cannot always be fully applied in countries where centralized or medium-term financing are not available and/or, in some cases, when the existing financing agreements at a company prior to its acquisition by the Group.

• **Interest risk rate**

The Group is exposed to interest rate risk on its financial liabilities and cash and cash equivalents. Its interest-bearing debt exposes it to interest rate fluctuations that impact its financial expenses.

A policy for monitoring and managing risk to limit the volatility of its financial income and expense has been established in order to avoid that risk.
• Securities related risk

I. Risk related to the Company’s shares.

Pursuant to its share buyback policy, and pursuant to the authorizations granted by the Shareholders’ General Meeting, the Company may choose to repurchase its own shares. Any fluctuations in the price of the Company’s treasury shares repurchased in this manner have no impact on the Group’s results. Any decrease in the Company’s share price could, however, have an impact on the potential amount paid out in shares in connection with the financing of acquisitions.

II. Risk related to other shares.

The Group holds equity interests in listed companies. Any significant and/or prolonged decline in the prices of these companies’ shares could have an adverse impact on the Group’s results.

Risk management
The Group has implemented a policy for monitoring this risk.

• Insurance and risk coverage

As regards risks other than financial market risks (which are described in the preceding Section Financial market risks), the Group has a global insurance coverage policy that is based on stringent technical assessments and uses insurance products from the world market, depending on availability and local regulations. Thus, this risk coverage is consistent for all companies over which the Group has operational control.

Insurance programs for property damage, business interruption and commercial general liability risk are negotiated at Group level for all subsidiaries, with leading international insurers. The “all risks except” policies are based on the broadest guarantees available on the market, coupled with deductibles which, while of varying amounts, are relatively low compared to those extended to groups of comparable size to reflect the autonomous management of subsidiaries.

The guarantee limits are set based on worst case scenarios and on insurance market availability. These programs were renewed on January 1, 2012 for a term of one year; the total cost of these programs was approximately € 23 million in 2011.
3.1 RETURN ON EQUITIES (ROE).

Return on equity ratio measures the company’s profitability by revealing how much profit a company generates with the money shareholders have invested and its calculated by doing:

\[
\text{ROE} = \frac{\text{Net Income}}{\text{Shareholder’s equity}}
\]

However, the profitability is also given by multiplying the margin, the turnover and the leverage of the company.

\[
\text{ROE} = \frac{\text{Net income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{equity}}
\]

The margin ratio measures how much a company earns (before interest and taxes) on each dollar of sales. It is calculated as net income divided by Net Sales. On the other hand, the turnover measures the number of times a company's inventory is replaced during a given time period. Turnover ratio is calculated as cost of goods sold divided by average inventory during the time period.

### ROE RATIO

<table>
<thead>
<tr>
<th>Year</th>
<th>Margin Ratio</th>
<th>Turnover</th>
<th>Leverage Ratio</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0.088499838</td>
<td>0.689436117</td>
<td>2.387322144</td>
<td>14.2%</td>
</tr>
<tr>
<td>2010</td>
<td>0.110229277</td>
<td>0.699798412</td>
<td>2.302680820</td>
<td>17.0%</td>
</tr>
<tr>
<td>2009</td>
<td>0.090842344</td>
<td>0.557877275</td>
<td>3.107938141</td>
<td>15.7%</td>
</tr>
<tr>
<td>2008</td>
<td>0.086298069</td>
<td>0.551929214</td>
<td>3.057864232</td>
<td>14.6%</td>
</tr>
</tbody>
</table>

As we can see, during the firsts three years the margin has increased as the same time as the turnover ratio. Furthermore, these three years the leverage ratio has
decreased what means the company has reduced its debt. Taking all this into account we can say that the company has increase its ROE by increasing both, the margin and the turnover (mainly the margin) and by reducing its liabilities, what means the company has reduced its risk.

However, in 2011 the ROE experiments an important decrease mainly because of the reduction of the margin. It means that despite the sales have increased the last year, the earnings for each unit sold have decreased. That could be explained because the cost of employees is higher so the costs incurred by the company remain high.

In order to compare and see where our company is situated in terms of ROE, we have computed the graph below. We have seen that our company is under the ROE average.
3.2 RETURN ON EQUITIES before taxes (ROE bt).

### ROE before taxes

<table>
<thead>
<tr>
<th>Year</th>
<th>EBT</th>
<th>TAXATION</th>
<th>REAL TAX RATE</th>
<th>1 - TAX RATE</th>
<th>ROE BEFORE TAXES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2,435,000.00</td>
<td>620,000.00</td>
<td>0.20</td>
<td>0.74</td>
<td>10.58%</td>
</tr>
<tr>
<td>2010</td>
<td>2,497,000.00</td>
<td>573,000.00</td>
<td>0.23</td>
<td>0.77</td>
<td>13.05%</td>
</tr>
<tr>
<td>2009</td>
<td>2,022,000.00</td>
<td>424,000.00</td>
<td>0.21</td>
<td>0.79</td>
<td>12.44%</td>
</tr>
<tr>
<td>2008</td>
<td>1,603,000.00</td>
<td>443,000.00</td>
<td>0.26</td>
<td>0.72</td>
<td>10.54%</td>
</tr>
</tbody>
</table>

In order to see what is the real evolution of the return of assets, it's convenient to calculate the ROE before taxes. To do it, first of all we have to know the real tax rate which is calculated as:

\[
\text{Real tax rate} = \frac{\text{TAXATION}}{\text{EBT}}
\]

In this way, we avoid the fiscal impact of the country and as a result, we can analyze how taxes affect the company’s ROE. For this reason, to analyze as more objective as possible the profitability of the company, we will use the ROE before taxes.
The value added is calculated by adding EBITDA plus Wages. As we can see, Danone has increased year by year its value added. However, another important point of view is to see what is the amount of revenues the company obtain for each euro invested on wages. So, for example the last year, Danone obtained 1.26 € for each euro invested in wages so the net profit was 0.26 cents.
3.4 RETURN ON ASSETS (ROA).

We use ROA as an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as "return on investment".

The formula for return on assets:

\[ \text{ROA} = \frac{\text{EBIT}}{\text{Assets}} \]

what would be the same as EBIT Margin Ratio \times \text{Turnover Ratio}.

We use EBIT instead of Net income because as we have seen before, the difference between ROE and ROE before taxes is known the fiscal impact. If we compare our ROA (using the margin ratio before interests and taxes) and comparing it to ROE before taxes, we will be able to analyze the debt impact.

As we see in the following table, the return of assets in Danone is:

<table>
<thead>
<tr>
<th>Year</th>
<th>Margin Ratio</th>
<th>EBIT</th>
<th>Turnover</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0.143564281</td>
<td>0.88943817</td>
<td>0.008144183</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>0.152436741</td>
<td>0.69976412</td>
<td>0.105677089</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>0.17091472</td>
<td>0.556577275</td>
<td>0.049179802</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>0.14369251</td>
<td>0.651029214</td>
<td>0.079368084</td>
<td></td>
</tr>
</tbody>
</table>

The evolution for the last 4 years has been minimum, being 2008 the year with the lowest ROA. The company has managed to increase its return on assets and to maintain, more or less, the same percentage (around 10%) during the period 2009-2011.
3.5 COST OF CAPITAL (K) AND SENSIBILITY.

When the company gets into debt, that means that it will have to assume a cost of capital, called K.

If our company has no debt, the ROE before taxes and the ROA happen to be the same. However, if we are indebted, we have to include K. That way, the equation is:

\[
\text{ROE before taxes} = \frac{\text{ROA} + (\text{ROA} - K) \cdot \text{Liabilities}}{\text{Equities}};
\]

If we know ROE, and ROA, as we also know Liabilities and Equities for Danone, we can estimate that the level of K for the company for the past 4 years has been:

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of capital (K)</td>
<td>9.249%</td>
<td>9.517%</td>
<td>7.273%</td>
<td>6.895%</td>
</tr>
</tbody>
</table>

In fact, there is another way of calculating cost of capital. The structure of K is as follows:

\[
K = \text{euribor} + \frac{\text{Liabilities}}{\text{Equities}} \times J
\]

where J is the sensibility of the bank towards our company, and is always > 0.

Then, if we obtain the value of Euribor, we can know what is the level of this sensibility indicator. For doing so, we have calculated the annual mean for Euribor, as indicated in the Excel sheet. The value of J for Danone is:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensibility J</td>
<td>5.37%</td>
<td>5.17%</td>
<td>4.34%</td>
<td>0.89%</td>
</tr>
</tbody>
</table>
Once we know our ROA, the Euribor for the period and J sensibility, we are capable now of calculating what would be the optimum point of the ratio Liabilities / Equities that would maximize our ROE before taxes.

Taking the first derivative of the following expression:

$$\text{ROE}_{bt} = \text{ROA} + \left[ \text{ROA} - \text{Euribor} \right] \cdot \frac{\text{Liabilities}}{\text{Equities}} - J \cdot \left( \frac{\text{Liabilities}}{\text{Equities}} \right)^2$$

we obtain that the point of Liab/Equities that make ROEbt maximum is:

$$\frac{\text{Liab}}{\text{Equities}} = \frac{\text{ROA} - \text{Euribor}}{2 \cdot J}$$

**Optimum Point for Liabilities/Equities**

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2019</th>
<th>2008</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.72726143</td>
<td>0.60198593</td>
<td>0.61011423</td>
<td>1.74555171</td>
</tr>
</tbody>
</table>

Focusing now just on year 2011, if we compare our ROEbt with our level of Liabilities/Equities:
As figures calculated indicated, the level of Liabilities/Equities that maximizes our ROEbt is around 0.7, what would mean a ROEbt of 12% approximately. However, as we have seen while doing previous ratios, the level of Liabilities/Equities for Danone in 2011 was of 1.3, what produced a ROEbt of only 10%.
3.6 GROWTH RATE.

To analyze what has been the evolution of net income, that is, the growth of Danone, we work out the Growth ratio, that we call $g$.

<table>
<thead>
<tr>
<th>NET INCOME</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4,180,000</td>
<td>1,313,000</td>
<td>1,361,000</td>
<td>1,875,000</td>
<td>1,871,000</td>
</tr>
</tbody>
</table>

GROWTH RATE

-68.59%  3.66%  37.77%  -10.88%

According to the data, Danone’s net income evolution has been irregular and not very positive during the last years.

In 2008 it had a very negative growth rate, going from 4 millions of net income to 1. Then, during 2009 there is a little recovery. 2010 means a recuperation of 37.77% and a growth of 500,000€ approximately. From 2010 to 2011, however, there is another decrease in terms of net income.
3.7 **RISK AND PROFITABILITY COMPARISON**

Once we have studied the risk and the profitability of Danone, we can show graphically what is the relationship between this two indicators. As previously explained, we determine the risk of a company by the solvency and liquidity ratios. Concerning to the profitability, we focus on the Return on assets.

If we combine this 3 indicators, we obtain the following graph (for year 2011):