COLEP IN THE BRAZILIAN MARKET

Market growth *versus* declining competitive advantage

Author: Inês Pita
Supervisor: Prof. Nuno Cardeal

Dissertation submitted in partial fulfilment of requirements for the degree of MSc in Business Administration, at the Universidade Católica Portuguesa, January 2014.

CATÓLICA LISBON
SCHOOL OF BUSINESS & ECONOMICS

GRUPO RAR

COLEP

COLEP IN THE BRAZILIAN MARKET

MARKET GROWTH *VERSUS* DECLINING COMPETITIVE ADVANTAGE

JANUARY 2014

Author: Inês Pita
Supervisor: Professor Nuno Cardeal

MSc in Business Administration
Major in Strategy & Entrepreneurship

ABSTRACT

Title: Colep in Brazil – Market growth *versus* declining competitive advantage
Author: Inês Pinto de Freitas Pita

The thesis that is hereby presented in the form of a case study aims to highlight the challenges that a Portuguese company, *Colep*, faces upon setting its operations in the Brazilian market. The case serves as a teaching instrument, since it allows students to apply the strategic frameworks they learn in class to a practical situation.

Colep Portugal – Embalagens e Enchimentos, S.A. is a contract manufacturing company that specializes in producing and filling, not only but mostly, aerosol products for major companies such as *Unilever, Procter & Gamble* and *Beiersdorf*.

Following its expansion strategy, Colep decided to enter the Brazilian market through a local join venture to take advantage of several local opportunities, such as market growth, increasing levels of consumption and disposable income. The company would also become closer to its clients, offering real-time solutions, with shorter lead-times.

However, the Brazilian market has shown several constraints at different levels, which vary from supply shortages to infrastructure limitations, tax burden and increasing input costs.

The case is based on a real life situation of a company's internationalization process. It's mainly focused on the analysis of the strengths and weaknesses of the Brazilian, namely the declining levels of competitiveness of the latter, and its resolution will revolve around the advantages and disadvantages for Colep that derive from developing its operations in this particular market.

ACKNOWLEDGMENTS

First of all, I would like to thank my thesis advisor, Professor Nuno Cardeal, for providing me all the necessary tools to develop my thesis. From the seminars to individual meetings, his feedback, field knowledge and guidance were determinant in the process of writing the case and the teaching notes.

Secondly, I would like to thank the persons that made this project possible, namely Dr. Américo Castro, a long-time family friend that mentioned Colep as a good company to develop my case study. Ultimately, he introduced me to Dr. José Henrique Santos, who always proved very eager to help, by sharing information and his knowledge on the subject.

Thirdly, I'm grateful for the help of my parents, which have always made my academic life possible, by believing that I was capable to outdo myself in every aspect, even when I didn't.

A very special mention goes to my auntie, Isabel, which supported me throughout this journey, by making my trips to Oporto possible, for always being so interested in the developments of my thesis and teaching me the value of taking chances.

Last but not least, to all of my friends that showed their enormous support and encouragement in times needed – for the good ones and the not so good ones. They are truly one of the engines that keep me moving.

TABLE OF CONTENTS

LIST OF EXHIBITS

CATÓLICA LISBON
SCHOOL OF BUSINESS & ECONOMICS

CASE STUDY

I. CASE STUDY

In the year of 2010, Colep announced that it would join forces with two Brazilian leading suppliers of personal and homecare care producers, as a way to enter the local market and possibly expanding its business to other South American countries.

After a careful evaluation of several other possibilities, from Asia to America, the Brazilian market seemed the most attractive one to invest in.

But soon Colep found out that although *"we [Portuguese and Brazilian] may share the same words, we don't necessarily speak the same language"*. In fact, doing business in Brazil proved very different from what Colep was used to in other European countries. And the challenges were here to stay.

1. COLEP

A sub-holding of Grupo RAR

RAR (Refinarias e Açúcar Reunidas), S.A. was founded in the year of 1962 by Dr. João Macedo Silva, as the result of the concentration of nine small sugar refinery plants from the north of Portugal.

In the 70's, RAR started to diversify its business, as the sugar industry was losing its profitability. By investing the profits obtained in the business, RAR decided to diversify both risk and capital.

Since that decade until now, RAR has followed an inorganic growth strategy through the acquisition of such firms as Portuguese chocolate producer *Imperial* (1971) and *Montarroio – Sociedade Comercial de Cafés, Lda.* (1981). The company also added other firms to its portfolio, such as *RAR Imobiliária* (1987), *Indáqua – Indústria e Gestão de Águas* (1994), *GeoStar* (200) and *Vitacress Salads* (2008).

As of 2012, the Grupo RAR held more than 6.073 employees worldwide and had a turnover of 1.032 million Euros.

History and acquisitions

In the year of 2000, Group RAR found itself holding excess cash, which were being invested in the stock market. On the short run, this worked just fine, but the company was eager to invest in promising business areas, so it could capitalise its growth in the future.

Soon enough, opportunity came knocking on the company's front door: Portuguese contract manufacturer *Colep Portugal – Embalagens e Enchimentos. S.A.* became available on the market. The company was held by a private equity firm, and had a yearly turnover of 125 million Euros.

Colep was founded in 1965 as a metallic packaging manufacturer. Rapidly, the company diversified into other segments, such as industrial packaging (i.e. paint, varnish, diluents and lubricants), contract filling of aerosol cans (shaving foam, hairspray, deodorants, insecticides, sausages, olive oil), contract filling of liquids and plastic packaging (See Exhibit 1).

By the year of 2000, Colep had three manufacturing facilities: one in Portugal (Vale de Cambra) and two other in Spain (Valdemoro and Navarra). There was an undergoing construction project of a factory in Poland, a market that was growing approximately 4% each year[1] and was conveniently located to serve other Central European markets.

The company's main business was to offer packaging and filling solutions to its list of clients, which included blue-chip[2] companies such as *Unilever* to *Procter & Gamble, Beiersdorf, Johnson & Johnson* and *Reckitt & Beckinser*. In simpler terms, Colep was in charge of manufacturing some of these companies' selected products (See Exhibit 2) and delivering the finished product.

After acquiring Colep, Group RAR's strategy for the company was to concentrate on the contract-filling segment and aerosols (which were higher value added segments) and to expand its business to other European countries. Therefore, they acquired other contract-manufacturing firms that operated in the market.

The first was the Canadian *CCL Industries*, in 2007. CCL was quoted company with several businesses, but in the contract filling segment it operated mostly in two markets: the USA and the European. However, the company wanted to exit the contract manufacturing business, focusing on its other core activities.

---

[1] *Data World Bank*, 2000

[2] Nationally recognized and well-established companies that produce high-quality, widely accepted products and services

Following an initial joint venture established between these two companies (which gave origin to *ColepCCL*), CCL decided to sell its 40% share on the European market to Colep.

> *"I don't believe in mergers. One part always ends up buying the other, sooner or later."*
>
> *Dr. José Henrique Santos, manager of Grupo RAR*

In the year of 2008, Colep acquired the German contract manufacturing and filling firm, *Czewo Full Filling Service GmbH*.

2. CONTRACT MANUFACTURING

Vertical integration (VI)

Since Colep was founded in the 60's, it has widened its activities mainly through vertical integration of the packaging value chain, which allowed the company to integrate its activities from upstream to downstream.

After the 25th of April (1974) military coup, Portugal offered contradictory business conditions and the political instability didn't attract any FDI[3]. As companies didn't want to build plants locally, unwilling to take a high political risk, they started to look for local manufacturers, as a way to integrate can production with its filling.

Colep saw this as a market opportunity and decided to integrate its activities, taking care of both packaging and filling. This required two different things: firstly, an investment in filling lines (which were non-specific assets); and secondly, Colep now had access to its clients' chemical formulas for the contract-filling products.

The new contract manufacturing allowed its final products to have a greater value added, which translated into greater mobility. While metal and plastic packaging are low value added products, they become immobile, so they're only competitive in local/closer markets.

[3] Foreign Direct Investment

"While the aerosol containers have a solid demand in the Iberian markets (since the transportation costs are lower), the same doesn't happen other countries – transporting air is quite expensive! So we have to sell them full, not empty.

Dr. José Henrique Santos, manager of Grupo RAR

Since there's no other company integrating its production of empty aerosol cans with its filling, Colep is the biggest contract manufacturer in Europe when it comes to this specific product.

The company offers its clients the possibility to acquire empty aerosol cans or to fill these cans with the aerosol product formula for them. Of the 260 million empty aerosol tinfoil cans that Colep produces yearly in Europe, only 30 million are incorporated in filling.

At the same time and although the company does not produce any kind of aluminum cans, it offers its clients the possibility to fill aluminum cans for them, by working with other parties that supply these types of cans.

The Business model

As a contract manufacturer, Colep's role is to attend to its clients needs. The company believes that customer intimacy is the best business model – each client communicates to Colep how he would like to have things done and the company adapts to its client requirements.

There is a huge flexibility in the way production can occur, it varies in between two types of production/contract manufacturing:

- **Full service**
  Given the product formula and specifications, Colep is in charge of acquiring the raw materials, producing the final product and delivering it to the POS.
- **Tolling**
  In this model, Colep is only responsible for assembling the final product, which means that its clients are in charge of delivering the raw materials (they usually outsource this) and picking up the final product at the end of the production process.

For Colep, this model is preferable to the one in which they provide a full service, since it doesn't require any investment in working capital (and thus reduces its funding needs).

The Clients

The main goal for Colep when it comes to its clients is to easily integrate all the clients' activities into what it does, reducing the burden that its clients have, which allows them to focus on their core business. As a result of its good practices, Colep holds relationships with some of its clients that have lasted more than 30 years.

Colep has to consider that its clients can become the biggest threat in the market if, for example, they decide to re-integrate the production process into its core activities, which jeopardizes Colep's business. Therefore, the latter has to make sure that it offers all the right conditions, from quality to pricing and privacy, to keep a good relationship running, where the client recognizes the benefits of outsourcing its activities.

"Our biggest competitors are our clients."

Dr. José Henrique Santos, manager of Grupo RAR

At the same time, many of Colep's clients outsource (fully or partly) some of its activities to other smaller, low-quality manufacturers[4], to make sure that they promote a competitive environment where the small producers help to set lower prices.

"I like to call it a 'divide and conquer' *strategy."*

Dr. José Henrique Santos, manager of Grupo RAR

3. Going fully global

Although Colep had already reached a stable and leading position in the European market, the latter didn't show any signs of future growth. While in Poland the manufacturing units are working at full capacity, in other countries such as Spain, the company was registering lower levels of activity. It was time for Colep to start considering and exploring other markets.

[4] They are considered low-quality since most of the times they don't carry any quality standards or certifications

Until the 2009' financial crisis, most of the multinational companies were managed at a local level, meaning that companies like *Unilever, Procter & Gamble, Beiersdorf* and *Reckitt Beckinser* used to have several headquarters spread around the globe – usually one for each continent. These HQs were usually in charge of the decisions of everything that happened in the countries that they controlled.

However, after the crisis, each of these companies decided that they would incur on a more global kind of management, taking over some of the decisions that were previously made locally. One of the major changes had to do with the suppliers: each company would now try to have just one supplier that could cater to their needs all over the world and not just in one continent.

The challenge was for Colep to develop manufacturing solutions in some of the major and most promising markets that its clients were operating in. This would ultimately improve the supply chain efficiency, reduce the lead-times and inventory levels and improve time-to-market.

Therefore, it was a time that required some decisions: *where should Colep go next?* There were three major alternatives:

- BRICs[5]
- USA
- Turkey

Countries such as **India** and **China** revealed themselves complicated, due to cultural and practical aspects, such as the requirement of local partners to enter the market and the fact that the level of consumption isn't quite high yet. These countries were the so-called *"back-burners"* – the timing wasn't just right. Nonetheless, Colep knew that they would sooner or later have to enter these markets.

Russia was a country that on a first glance showed a lot of potential: exponential growth in the past few years, low input costs and most of Colep's clients were already operating there. However, technicalities associated with market entrance stopped Colep from going further with this project.

The **USA** market still didn't show much potential: it wouldn't bring great profitability, due to its saturation, crushed margins and high input costs.

[5] Brazil, India, China and Russia

And **Turkey** was set aside mainly due to the cultural and religious differences.

In the end, Colep was left with the option to analyse the Brazilian market.

4. The Brazilian market

Overview

With a GDP[6] of 5.150 trillion Reais (approximately 1.645 trillion Euros) in the year of 2012, Brazil is the world's seventh wealthiest economy, holding the largest area and population (198.7 million) in Latin America.

In 2010, Brazil reached the highest growth rate of the past 25 years, with a GDP growth of 7.5% (See Exhibits 3 and 4). However, due to the world financial crisis, in the next two years (2011 and 2012) the GDP growth decelerated to 2.7% and 1.5%, respectively. This was mainly due to lower levels of exports, decreases in domestic demand and shrinking of the net investment.

The year of 2013 has shown signs of a rebound for the Brazilian economy with recovering export markets, general improvements in the global economy, a 5.4% unemployment rate (one of the lowest rates ever), rising average incomes and sustained domestic consumption – which ultimately will be the main pillar of Brazil's expansion.

Nonetheless, there are several challenges that threaten the Brazilian economy and local manufacturing companies in the medium and long-term, such as supply-side constraints, increasing labour costs and a complex taxation system.

The aerosol market

With the increase in the purchasing power of the Brazilian, the local aerosol market has shown a continuing growth over the last decade. It has grown from an overall volume of around 173 million units in 1998, to 545 million units in 2009[7] (See Exhibit 5).

[6] Gross Domestic Product

[7] ABAS (Brazilian Aerosol and Sanitary Household Products), 2010

In the year of 2009, of the 545 million units that were marketed, 313 million were produced in Brazil and 232 million were imported from other countries, meaning that the domestic production only accounted for 57% of the aerosol market (See Exhibit 6). The personal and homecare products' segment accounted for more than half (56%) of the marketed aerosol cans (See Exhibit 7) in that very same year.

Argentinian producers were the main suppliers for the Brazilian market, due to a lack of Brazilian companies that could meet the international standards for aerosol-based products manufacturing. Argentina was the world's fifth largest producer; however, due to the political and economical instability, all the major clients were moving their operations away from the country.

At the same time, growing investments in the Brazilian market of aerosols were reducing the market dependence on imports. Packaging manufacturers and aerosol fillers, such as Colep, stepped up their investments to expand production and meet the needs of the domestic market. As the market became more appealing, multinational companies started looking for solutions to produce their products locally.

Over the last decade, the Brazilian population saw their levels of income rising. An emerging middle class, composed by classes C and D (See Exhibit 8), shifted their consumption patterns. These consumers now spend a greater percentage of their salaries in fast-moving consumer goods, such as personal care (See Exhibit 9) and household products.

One of the major trends is the exchange of plastic packages of squeeze-type deodorants (i.e. *roll-on deodorants*) for those packed in aluminium (i.e. aerosol *deodorants*), which have higher quality.

By the end of 2012, the annual consumption of aerosol products in the Brazilian market had already reached 833 million units.

Local partners

To enter the Brazilian market, Colep knew that they needed to establish a local partnership with a company that already had some market knowledge. There was no way that Colep could enter the market all by itself and at the same time, this partnership with local players could enhance Colep's credibility.

After doing some research, and by their clients' recommendations, Colep chose to partner up with the biggest local producers *Provider Indústria e Comércio, S.A.* and *Total Pack Indústria e Comércio, S.A.*, which had registered a combined turnover of 400 million Reais (around 170 million Euros) in the year of 2009.

The two companies were leaders in the liquid filling of personal and homecare products, but they also saw the opportunity they were missing in the aerosol market. However, they did not have the money needed to invest in such activity.

As a result, *Provider* and *Total Pack* joined forces through the creation of the group *ZM (Zalachett-Matarazzo) Participações, S.A*. Colep acquired a 51% stake of ZM group, and this joint venture gave origin to *CPA – Colep Aerosol Provider*.

Both *Provider* and *Total Pack's* manufacturing facilities were located in Louveira, in the state of São Paulo and were ideally placed to serve the Brazilian personal and homecare products' market.

- **Provider's** plant holds 26 lines, with a 720-million unit annual capacity, with 1200 employees. It mainly produces Personal Care liquid products.
- **Total Pack** has 10 filling lines, with a 240-million unit annual capacity and a 320 strong workforce. It specializes in the Homecare liquid products.

In the end, this joint venture brought together the best of both worlds: Colep pitched in with its wealth in terms of European experience and *Provider* and *Total Pack* contributed with their clean Latin American market knowledge and expertise. This allowed Colep to define a successful strategy to enter the nearest markets, which were experiencing exponential market growth and aerosol product consumption.

The partnership with the two Brazilian companies also allowed Colep to have access to new clients, such as *Natur* and *O Boticário,* while keeping its blue chip[8] and international customer base.

The manufacturing facilities

CPA new aerosol manufacturing and filling facility was located in Itatiba (São Paulo), approximately 20 km away from *Provider* and *Total Pack's* production sites, which remained active.

[8] Company renowned for the quality and wide acceptance of its products or services

The construction of the new plant was completed by the end of 2011. However, due to the timing of the operating licenses (issued by ANVISA[9]), the production only started in July 2012.

The plant was built from the ground up, as a result of a greenfield investment[10] of 50 million Reais (approximately 20 million Euros). It's equipped with 3 filling lines, an annual capacity of 150 million units and 100 employees.

In just a year, CPA has had the opportunity of manufacturing products for some of the most important national and international brand owners, such as *L'Óreal, Coty, Bic, Natura, O Boticário, Johnson & Johnson* and *Beiersdorf*. The range of products goes from sun care to hair care, shave, foot care, body care, face care and intimate care. And the portfolio continues to expand.

By keeping *Provider* and *Total Pack's* manufacturing facilities running, alongside with the new aerosol filling plant, Colep was making sure that it would grab the opportunity of the up and coming aerosol market, but it would also serve the lower end of the market (i.e. non-aerosol products, such as creams and liquids). Although there's a tendency for the latter to disappear overtime, there's still a large portion of the population belonging to classes D and E that cannot afford aerosol products.

In the end of its first year of activity, Colep's activity in Brazil had rendered a turnover of 415 million Reais (approximately 165 million Euros). This accounted for about 30% of Colep's turnover in the year of 2012. On the other hand, the European business only grew about 3%, accounting for the remaining 378 million Euros of Colep's annual turnover (See Exhibit 10).

Players

When Colep decided to enter the Brazilian market, the two biggest players in their business segments (contract filling of personal and home care products, respectively) were *Provider* and *Total Pack*.

[9] Agência Nacional de Vigilância Sanitária

[10] A form of FDI, where a company starts a new venture in a foreign country by constructing new operational facilities from the ground up

As there was no company that performed contract filling of aerosol products in Brazil, the products all came from Argentinian producers. One of the biggest companies that’s still supplying the Brazilian market is *Exal Packaging*, which produces its own packages and is also in charge of filling them.

However, due to the increasing demand for aerosol products in the Brazilian market, there was a clear market opportunity for companies to enter this market. This would ultimately mean that the market’s dependency from Argentinian producers would grow smaller and smaller, until the market became self-sufficient.

It didn’t take long for other companies to recognise the growth potential of this specific market. French contract-manufacturer company *Fareva*, currently Colep’s biggest competitor both in Europe and Brazil, entered the market practically at the same time that Colep did, through a joint venture with *Tubex*.

The main difference between Colep and *Fareva* is that the latter sources most of its empty cans from *Tubex*, a German company that specializes in the production of aluminium and plastic cans. Although both companies, *Fareva* and *Tubex*, operate in other segments, their primary focus on the Brazilian market were too the aerosol products.

Suppliers

An aerosol is basically made out of several components: the can itself, the product (liquid formula), a propellant, and other small parts – a valve with a dip tube and an actuator (See Exhibit 11).

Therefore, Colep’s raw materials come mainly from two types of suppliers:

- **Empty alluminum/tinfoil cans and other small parts**
  As CPA does not produce any empty cans, they have to resort to the available suppliers in the market. The product comes mostly from Argentinian producers, whom have been supplying the Brazilian market for several years.
  As a result, there are several players that produce empty cans (such as *Exal* and *Ball Aerosol Packaging*).

  Nonetheless, as the market grows in Brazil, the local offer of empty cans grows bigger every year, with companies such as *Companhia Metalúrgica Prada* and

Impacta (empty cans), both Brazilian companies, and *Lindal* (valves and diptubes and actuators), a Europe-based group with manufacturing facilities in Brazil. CPA also works with European suppliers, which most of the times has proven to be very inefficient. Some parts and other components tend to be held at customs and CPA has to pay tariffs in order to release them.

- **Gas suppliers**

  During the production process, Colep uses the so-called BOV[11] system, which operates mainly a compressed gas propellant (either air or nitrogen), instead of CFCs[12] (also know as *greenhouse gases*) that are extremely harmful for the ozone layer. Besides being environmentally friendly and very cost competitive, the system also allows aerosol-fillers to reduce product degradation and better utilisation/evacuation of can volume, while using the same cans and valves as the old systems.

  There are only two gas suppliers in the Brazilian market – *Petrobras* and *Ultragaz*. This duopoly allied to a great market protection contributes to extremely high gas prices when compared to those in Europe. However, since the product is produced and sold locally, Colep can easily pass on this cost to the client.

5. MAIN CHALLENGES

Although Brazil revealed itself as a very promising market, Colep has been facing several challenges in the Brazilian market due to the latter's economic environment (See Exhibits 12 and 13).

Supply-sided constraints

In the Itatiba filling manufacturing facility, Colep works with its biggest client in a tolling production model, meaning that the client is in charge of delivering the inputs that are necessary for the production and Colep's only job is to transform those raw materials into a final product, adding value to it through man labour.

[11] Bag-on-Valve
[12] Chlorofluorocarbons

One of the measures that Colep uses to evaluate its delivery performance is the OTIF[13] (in simpler terms, client satisfaction level), which is calculated based on the ratio of the number of units delivered in relation to the number of units ordered, given a certain deadline that was established when the order was placed.

In 2013, the OTIF in the Itatiba CPA aerosol facility was around 25% to 50%, meaning that Colep usually only delivered to its clients, on the date agreed, a quarter to half of the units they ordered.

The reason behind this apparent failure a supply chain bottleneck. Most of the times, suppliers fail to deliver the inputs necessary to the production process. Therefore, Colep cannot predict how many raw materials will be delivered or when will they be delivered, so the production constantly faces a bottleneck that lies beyond the walls of the manufacturing facility and it's completely out of the company's span of control.

As Colep's major clients in Brazil choose a model of tolling, and although this is the model that Colep prefers, there's an underlying problem that results in Colep's lack of control over the supply chain. Most companies that outsource their activities (i.e. *L'Oreal*) create their own outsourcing department, which is in charge of taking care of all the activities the company outsources. In order to justify their existence, these departments tend to outsource different activities to different manufacturers; otherwise, if they would outsource all the activities to one single manufacturer, the department's existence wouldn't make sense.

Furthermore, it's very common for Colep's client to suddenly change the ordered quantity due to the demand volatility. This means that changes can go both ways: the client can increase the ordered quantity, and there's no certainty that this additional quantity can be delivered; or it can decrease the ordered quantity, which means that Colep will most probably be left with units in stock, carrying extra costs for the company.

Increasing labour costs

One of the biggest drivers of production costs in Brazil is labour costs. Real labour costs in the industrial/manufacturing sector have been rising at a steady pace in the

[13] On time, in full

past years (overtaking countries such as Mexico and Taiwan), but are outpacing the labour productivity, which leads to a loss of external competitiveness (See Exhibit 14).

Real wages have risen at a pace of 3.4% from 2008 to 2013 and the real value of the minimum wage has almost doubled over the last decade. This is due to an automatic government law that determines minimum wage increases as the sum of the inflation in the preceding years and average real GDP in the two preceding years. Although higher income levels mean greater consumption, it also means that the cost of labour is becoming more expensive.

For the contract manufacturing industry, which creates value by incorporating labour into the final product, this comes with a huge impact – Colep will, on the long run, lose its competitive advantage in terms of pricing.

Complex taxation system

Nowadays, Brazil has a very complex and fragmented system of six indirect taxes, which translate into high compliance costs. One of the largest taxes is the state-level tax ICMS[14] (which works as the local VAT[15]), for which there's no national uniform tax code – each state applies a different tax code, and many of the different states' tax codes are in some ways contradictory.

In the case of electricity, for example, there are a total of 27 different taxes that are applied to its consumption.

Tightening of access to financing

Nowadays, Brazil has been practicing extremely high interest rate spreads. Despite the increased flexibility of the country's monetary policy, conducted by *Copom*[16], which aimed to bring back one-digit interest rates, the central bank decided to raise the SELIC[17] rate to 10% from 9.50%[18]. At the same time, taxes levied on credit

[14] Imposto Sobre a Circulação de Mercadorias e Serviços
[15] Value Added Tax
[16] *Comité da Política Monetária* (Monetary Policy Committee) which works as Brazilian's Central Bank)
[17] *Sistema Especial de Liquidação e Custódia* (Special Clearance and Escrow System) is the Brazilian Central Bank's overnight rate

operations (i.e. IOF[19] and income taxes) and growing defaults in the past contribute to the increase of the interest rates.

On an attempt to lower inflation rates, Brazil has the highest interest rate amongst other major world economies and it is one of the few countries that are still raising borrowing costs, whereas countries such as Mexico and Poland are cutting back these costs.

A company like Colep, with a good risk rating, has a borrowing *all-in*[20] interest rate of about 20%, which is a cost that will eventually, and indirectly, be passed on to its clients.

6. OUTLOOK

After the Brazil's first move for expansion outside Europe, Colep has already acquired other two factories, one in Mexico and the other in the United Arab Emirates (UAE). Nowadays, the company is present in several countries, holding a total of 12 manufacturing facilities and developing joint ventures (i.e. *Scitra,* UAE) and partnerships (i.e. *One Asia Network*) (See Exhibit 15).

Although the Brazilian market reveals a very promising future growth when it comes to beauty and personal and homecare products, Colep still had to manage several infrastructural and bureaucratic problems.

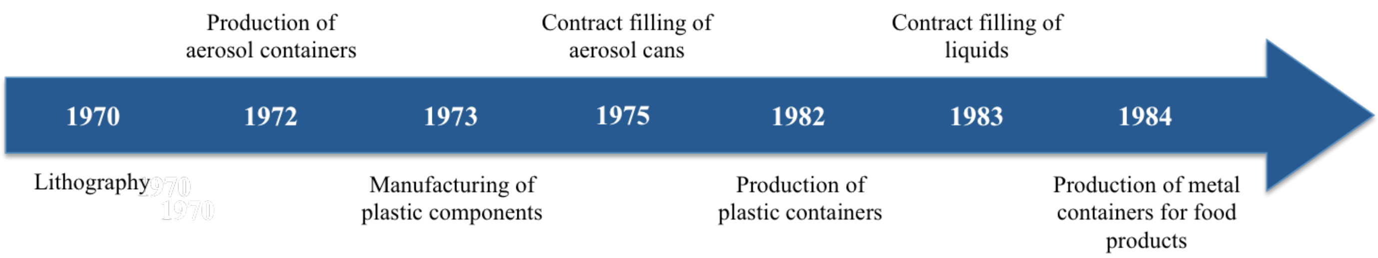
By entering other markets, such as Mexico and the UAE, the company expects to. Mexico nowadays holds one of the cheapest labour forces at a shop-floor level[21] (even cheaper than China[22]) and the local operations will have the capability to serve both the USA and the Canadian markets at a competitive price.

On the other hand, the UAE operation will allow Colep to enter an unexplored market, where demand for these kinds of products is increasing. The question now is: can Colep manage to surpass the market limitations on the short-run? And on the long run, can the Brazilian operations lose their competitive advantage?

[18] *Reuters*, November 2013
[19] *Imposto sobre Operações de Crédito* (Tax on Financial Operations)
[20] Discount interest rate added to a commission
[21] Part of the factory that houses machinery and where men are directly involved in production.
[22] *Boston Consulting Group*, June 2013

II. EXHIBITS

Exhibit 1 – Colep's vertical integration of activities



Source: company reports

Exhibit 2 – Colep's range of manufactured products

Source: www.colep.co

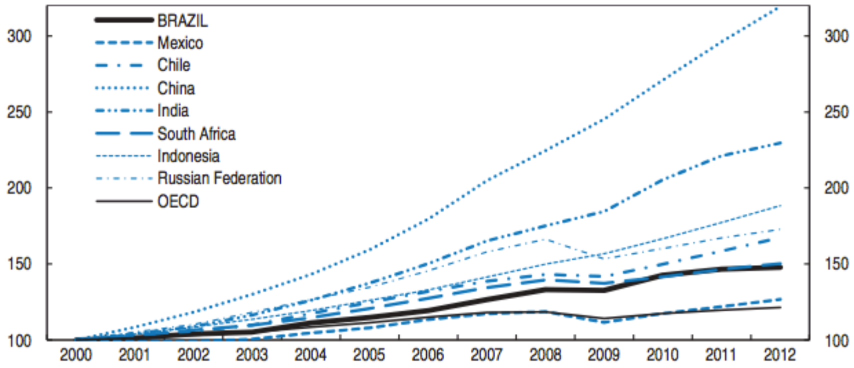
		Aerosols	Liquids	Tubes
CONSUMER PRODUCTS	**Personal Care & Beauty**	Anti-perspirant sprays, bag-on-valve, body sprays, color care foams, deodorant sprays, depilatory products, dry shampoos, face and body mousses, foam mousse/balsams, foot deodorants, hair mousses, hair sprays, heat sprays, insect repellents, oral care, perm care products, self-tan sprays, shave gels, shaving foams, styling foams, suncare mousses, truspray	2-phase products, after-shaves, body lotions, conditioners, deep conditioners, eau de toilettes, foam/oil/milk/cream/foot bath products, hair gels, hair treatment, hand and face care, oral care, roll-ons, shampoos, shower and aroma oils, shower gels	Body creams, hand creams, oral care, shaving creams
	Homecare	Air fresheners, bathroom mousses, carpet cleansing foam, furniture cleaners, furniture polish, insecticides, ironing spray with starch, licensed veterinary aerosols, oven/grill cleaners, prewash sprays, spray for waterproofing, stainless steel cleaners, toilet and bath cleaners	Detergents, dishwashing liquid, enzyme laundry cleaners, fabric softeners, glass cleaners, liquid waxes, lubricant oils, multi-purpose cleaners, neutral/all-purpose cleaners, stain removers, stain dissolvers, toilet and bath cleaners, window cleaners	
	Car Care	Brake cleaners, car appearance and maintennce products, cavity sealants, floor sprays, general lubricants, glass celaners/de-icers, high performance lubricants, industrial products, interior sprays, leak detector sprays, leather cleaners, lubricants (motor), rust dissolvers, scratch protection, silicon sprays, tyre foams, upholstery cleaners		

HEALTHCARE	Cardiovascular, spray bandages, coldsprays, wound treatment sprays, pain relief gels, local anaesthetics, fungicides, nasal sprays, facial sprays, artificial saliva, antiseptic sprays, oral care

PACKAGING SOLUTIONS	**Metal packaging**	Tinplate aerosols, general line packaging (general line cans, chemical cans, food cans, paint and coating cans), printing
	Plastic packaging	Blow molding, injection molding
	Co-packing	Labelling, blister packs, clam packs, cartoning, re-packing, promotional packaging, stickering, sleeving, gift sets, shrink wrapping, bespoke assembly, re-working, cello-wrapping, flow packing

Exhibit 3 – Brazil's growth in international comparison

Real GDP at purchasing power parity (2000=100)



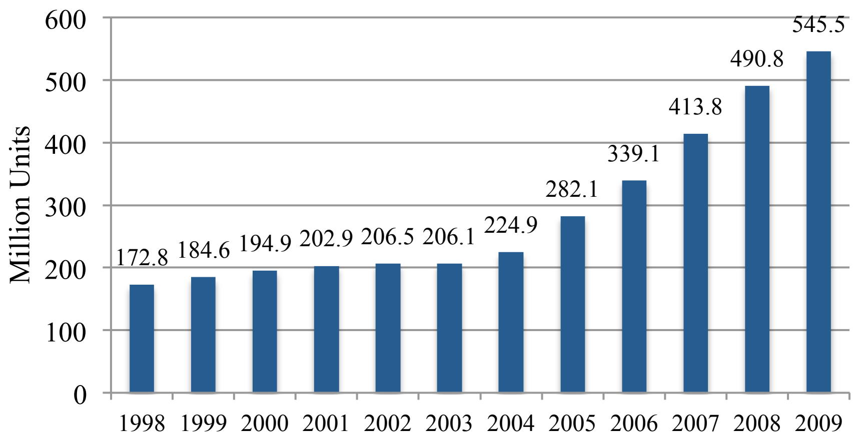
Source: OECD Economic Surveys, Brazil 2013

Exhibit 4 – Brazil's basic economic indicators (2008-2012)

	Unit	**2008**	**2009**	**2010**	**2011**	**2012**
Total population	'000	189 613	191 481	193 253	194 933	198 763
Population growth rate	%	1,1	1,0	0,9	0,9	2,0
GDP	USD billion	1 653	1 622	2 142	2 474	2 253
GDP per capita	USD (PPP)	10 405	10 415	11 180	11 640	12 055
Real GDP growth	%	5,2	-0,3	7,5	2,7	0,9
Inflation rate (all items)	%	5,7	4,9	5,0	6,6	5,4
Unemployment rate	%	7,9	8,1	6,7	6,0	5,5

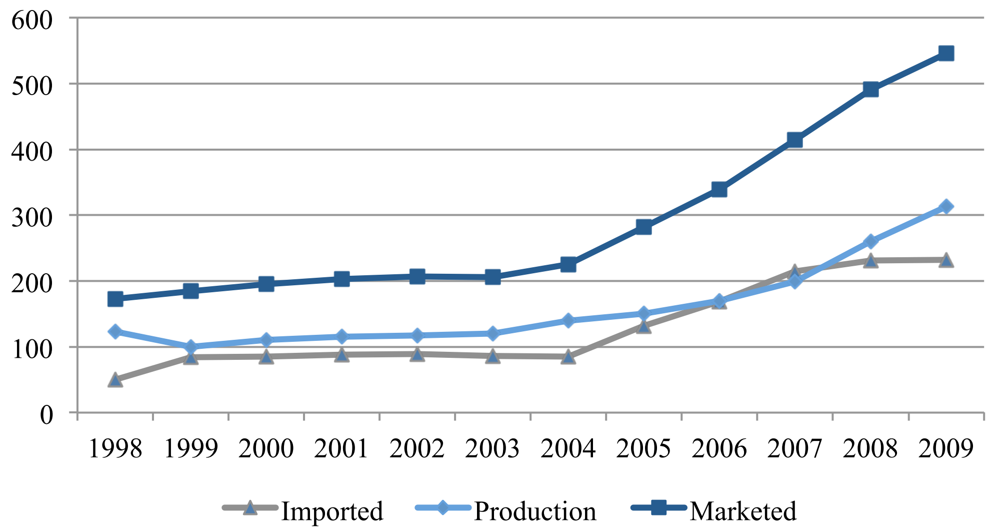
Source: OECD Factbook 2013, IBGE, Central Bank of Brazil

Exhibit 5 – Evolution of the Brazilian's aerosol market (1998-2009)



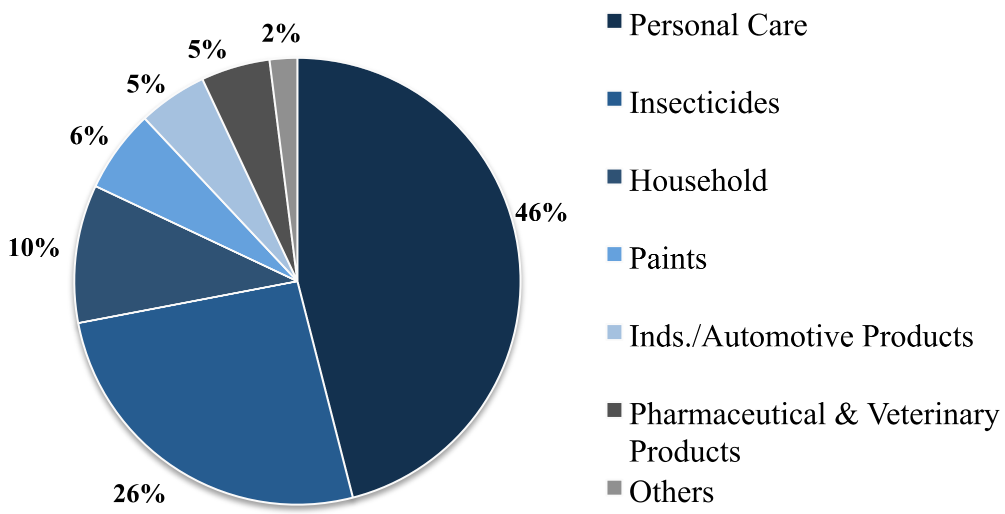
Source: ABAS

Exhibit 6 – Brazil's domestic production *versus* imports in the aerosol market



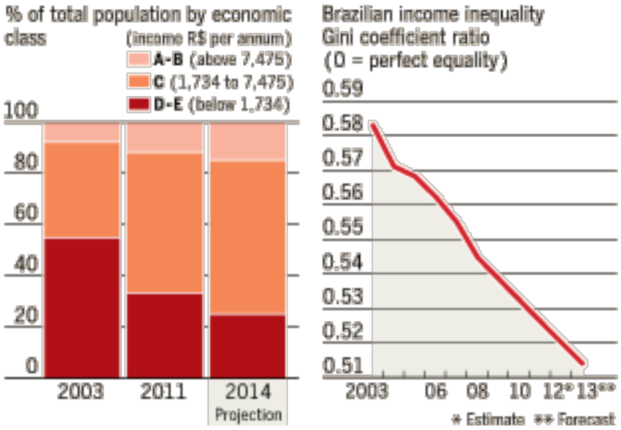
Source: ABAS

Exhibit 7 – Distribution of the aerosol market by product type in Brazil (2009)



Source: ABAS

Exhibit 8 – Distribution of economic classes and income inequality ration in Brazil



Source: CPS/FDV

Exhibit 9 – Brazil's sales of Beauty & Personal Care products by category (2006-2011) and CAGR

R$ million	2008	2009	2010	2011	CAGR 2006-2011	CAGR 2011-2016
Bath and shower	4 284,60	5 349,00	5 588,90	5 899,90	14,90%	2,40%
Deodorants	4 841,50	5577,8	6 551,70	7 200,60	14,50%	8,80%
Depilatories	207,30	269,9	362,30	438,80	24,10%	9,30%
Fragrances	7 697,20	8674	10 169,40	10 882,20	13,40%	6,70%
Hair Care	10 841,20	11 980,60	13 539,90	14 507,70	7,10%	6,90%
Men's grooming	4 176,40	4 742,90	5 673,40	6 375,70	14,30%	6,50%
Oral care	4 517,90	5 250,70	5 112,80	5 768,10	8,80%	6,40%
Skin care	5 765,30	6 594,80	7 383,70	7 762,40	12,90%	4,70%
Sun care	1 437,20	1 724,50	1 954,70	2 311,60	19,50%	7,70%

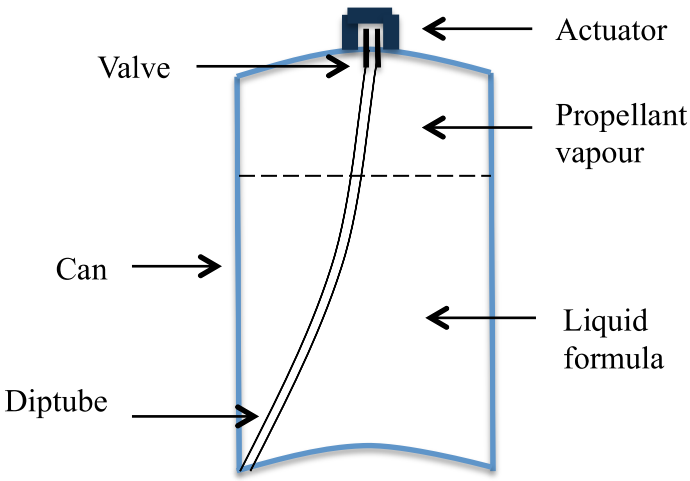
Source: Euromonitor International

Exhibit 10 – Colep's annual turnover (2009-2012), combined and by region

	2009	2010	2011	2012
Turnover (M€)	387,00 €	478,00 €	511,00 €	543,00 €
Growth	-	23,5%	6,9%	6,3%
Europe	387,00 €	365,00 €	367,00 €	378,00 €
		-5,7%	0,5%	3,0%
Brazil	-	113,00 €	144,00 €	165,00 €
			27,4%	14,6%

Source: Colep's annual reports (2010 and 2012)

Exhibit 11 – Components of an aerosol can



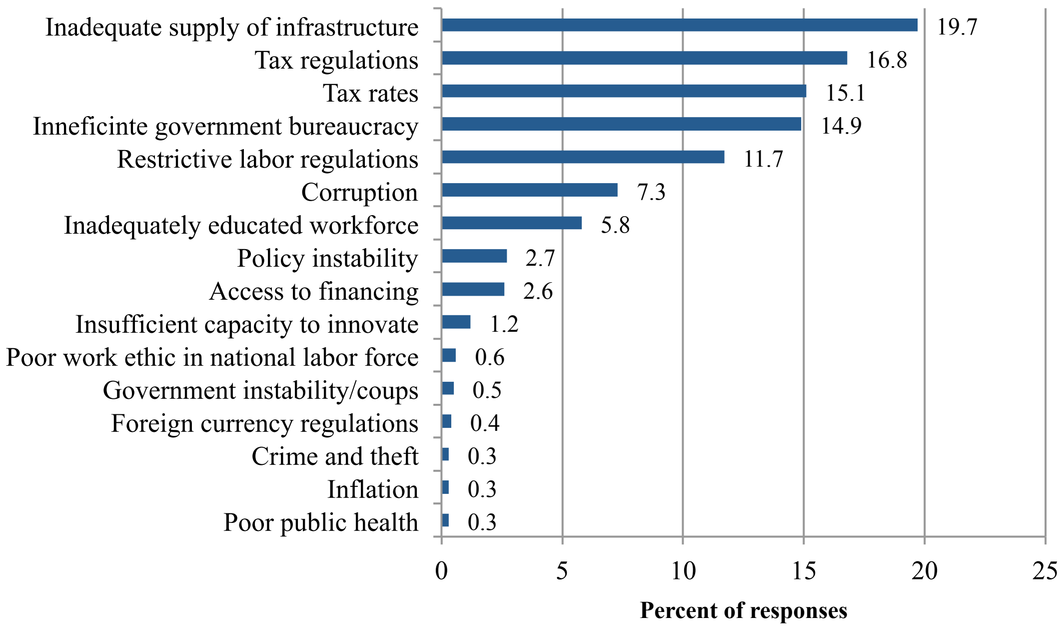
Source: www.edding.com

Exhibit 12 – Brazil economic environment
Country's position/Number of countries assessed

Easiness of doing business	130/185
Investor protection	82/185
Cross-border trade	123/185
Contract enforcement	116/185
Economic Freedom	100/177
Global competitiveness	48/144
Basic requirements	73/144
Infrastructure	70/144
Institutions	79/144
Efficiency enhancers	38/144
Innovation	39/144
Risk group	3
S&Ps rating	
Long-term debt (local currency)	A-
Long-term debt (foreign currency)	BBB
Outlook	Stable

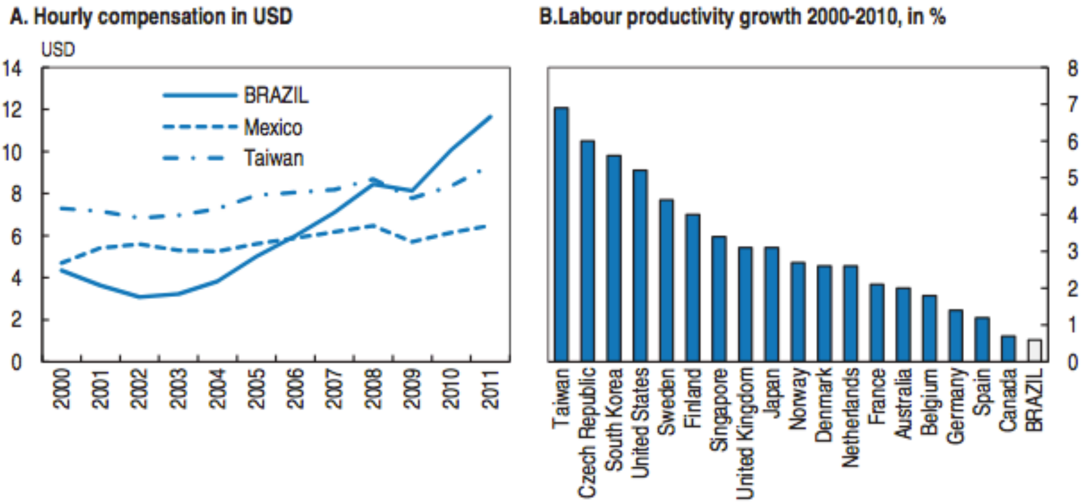
Sources: FMI, World Bank, COSEC, Bloomberg, World Economic Forum

Exhibit 13 – The most problematic factors for doing business in Brazil



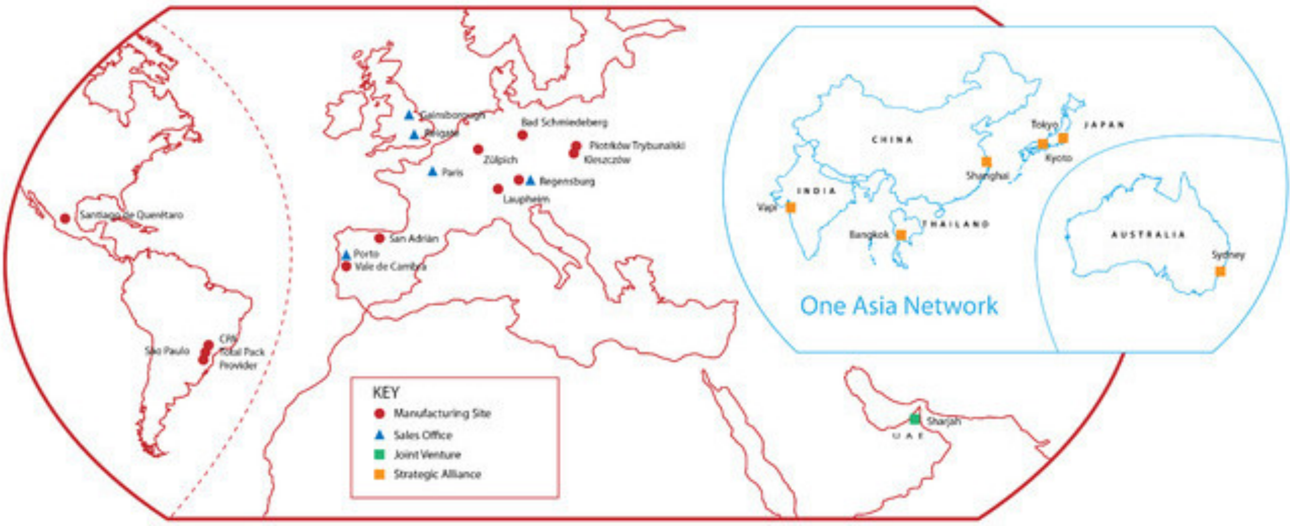
Source: The Global Competitiveness Report 2013-14

Exhibit 14 – Wages and productivity in the manufacturing sector



Source: OECD Economic Surveys, Brazil 2013

Exhibit 15 – Colep’s global operations



Source: www.colep.com

THEORETICAL BACKGROUND

III. THEORETICAL BACKGROUND

1. Contract manufacturing (CM)

Contract manufacturing can be described as a supply chain arrangement that allows a manufacturing company to outsource some of its internal manufacturing processes to contract manufacturers (Kim, 2003). These manufacturing processes can range from single phases of the whole process within the production phase of a company's value chain, with the aim of producing a finished product (Valkonen, 2009).

Whereas outsourcing refers to an activity (i.e. transportation, warehousing, information technology) that a company formerly conducted by itself and that is now conducted by another company, contract manufacturing (although it is too a form of outsourcing) concentrates strictly to manufacturing activities. Therefore, the two terms are intertwined and they will and can be used as synonyms during the discussion.

CM involves two parties: the manufacturing company (outsourcer), who buys the product; and the supplier company (vendor), the one who provides the outsourced good to the buyer (Franceschini et al., 2003).

While the buying company still owns the brand rights and is responsible for selling the product to the final user, the supplier is in charge of the partial or complete manufacturing responsibilities.

2. Benefits of Contract Manufacturing

According to Iloranta and Pajunen-Muhonen (2008), there are several benefits that come from outsourcing (as cited by Valkonen, 2009), such as:

- Cost savings
- Freed capital resources
- Technological advantages
- Concentration on core competencies
- Flexibility

Cost savings usually derive from the scale/technological advantage that a supplier can get by producing larger volumes. As a result, the supplier can benefit from lower unit producing costs, as it specializes in supplying few services and learns the most efficient ways to do things (Lonsdale, 1999). This ultimately decreases the price the buyer has to pay for the finished product and the company won't have to carry in-house some activities that would require heavy investment in fixed capital and might not be as price competitive as its supplier (McIvor, 2000).

As the buyer outsources some of its manufacturing activities, it can free up some of its capital to other higher value added activities (Valkonen, 2009). By sourcing out some of its functions beyond key focus (Zhu et al., 2001) the buyer can free resources towards more productive activities, concentrating in its core competencies.

It is especially advantageous for a firm to outsource its activities to a supplier when the former can access a technology that its does not own and/or would require a high, asset-specific investment. Since the buyer may not produce in large volumes, it would take the company a high amount of time to recover the investment made. On the other hand, as the supplier only focuses on a manufacturing activity, producing for several buyers, it can recover its technological investment in a quicker way – benefiting from the so-called scale advantage (Valkonen, 2009).

Suppliers also struggle to increase their competitive advantage, so they are more likely to have up-to-date technology to serve the buyers and develop products with higher quality (Jennings, 2002), with faster processes, which ultimately reduces time-to-market (Blanchette, 2004).

Last but not least, outsourcing its manufacturing activities allows the buyer to increase is response to market needs (time-to-market) in cases where the demand can fluctuate or is uncertain do to market volatility (Blanchette, 2004).

3. Problems and risks of Contract Manufacturing

Regardless of the listed advantages of CM, there are also some drawbacks that have to be taken into account when making a decision of outsourcing some of the company's activities. Some of the most common disadvantages of outsourcing (Fan, 2000; Heikkilä and Cordon, 2002) are:

- Transfer of critical know-how
- Confidentiality and security

- Quality
- Changes in the balance of power
- Opportunism and contractual issues

As some of the manufacturing process' information (i.e. product formulas) is transferred from buyer to supplier, there's a risk that the former is providing the latter with the opportunity of becoming one of its competitors once the contract ends (Blanchette, 2004).

Besides being difficult to control the supplier's activity, guaranteeing that the product is delivered on time, with the desired quality, buyers cannot predict any kind of opportunistic behaviour from the supplier when renegotiating the contract. If the supplier believes that there are high switching costs for the buyer (Momme and Hvolby, 2002) or there are no market alternatives, it can try to make the terms more favourable to itself (McIvor, 2008).

4. Vertical integration (VI)

A firm is vertically integrated when it owns or controls the assets in successive stages of the value chain. That is, if it has two or more adjacent economic activities under its ownership control, and uses the outputs of backward stages as inputs in forward stages (Fronmueller et al., 1996).

Forward vertical integration occurs when a company moves downstream towards its end consumers (Henry, 2008), including in its portfolio other activities such as distribution. In the end, vertical integration can benefit both the manufacturer and the client, since it allows one step – and one mark-up, to be passed over. The manufacturer can charge a little more for the new integrated activity and the client will pay less that it would have if it had outsourced this activity to other company or even if it had performed it itself.

5. Value chain

The value chain of a company evaluates which value each particular activity adds to the organizations products or services (Porter, 1985). By adding activities to its value chain, companies are able to deliver a final product to its customer that has a higher value – and thus customers are willing to pay more.

When defining its value chain, a company has to define if it wants to take of all its activities or if it wants to outsource the activities that aren't its core competences. By doing so, a company recognizes that there may be other organizations that can perform certain value chain activities at a lower cost and in a more efficient way.

6. PEST analysis

The PEST analysis allows an overview of several macro-environmental factors that the company should take into account when defining its strategy in a particular industry. All the variables included will ultimately define the organization's success or failure in a given market.

The acronym PEST stands for political, economic, social and technological. The political factors include government policy, namely government stability, taxation policy and government regulation. The economic factors include key economic indicators such as interest rates, income, unemployment rates etc. The socio-cultural dimension includes social trends, population growth, cultural habits, etc. Last but not least, the technological dimension is all about R&D, innovation, the rate of technological change, etc. (Johnson et al., 2002).

Through the PEST analysis, managers can identify the key drivers that influence their businesses and focus on developing and strengthening the latter. Those key drivers with the highest priority should be addressed first than others, allowing for an effective action. Also, as one key driver changes, it may affect others (Johnson et al., 2002).

An extension to the PEST analysis could also include environmental and legal factors, which in our analysis would be included in the social and political factors, respectively.

7. Industry Life Cycle

The industry life cycle (ILC) refers to the four different stages of development of an industry, namely introduction, growth, maturity and decline (Porter, 1980). The industry is one of the most important parts of the environment of the firm – its strengths and weaknesses ultimately determine if the company is successful or not.

The ILC analysis ultimately can help an organization to know where the stage of development of the market it operates in, and thus design a strategy to match the needs of each stage.

8. Porter's Five Forces

The five forces framework allows the assessment of the competitive environment of a particular industry, as well as to determine the attractiveness of the latter in order to determine the its profitability.

The five forces are: threat of new entrants, bargaining power of buyers, bargaining power of suppliers, threat of substitute products and, last but not least, intensity of rivalry among firms. For each force, there are several constituent elements that determine its strength and impact on industry profitability (Porter, 1979).

Although each organization is unique in its own way, the forces that operate within the industry will affect every company in the same way – the only difference is in the way that each company responds to them. Therefore, a manager's goal is to find the company's right positioning within the industry in which it can defend itself against these forces or, ultimately, try to influence these forces into its favour.

9. Joint ventures

A joint venture (JV) typically occurs when two companies form a separate organization, in which they both hold an interest. They usually occur when two firms feel that it's beneficial to combine their knowledge and resources or they need to enter a new market and/or new country where the firm cannot own assets outright (Henry, 2008). JVs also benefit the two firms in a way that they may allow cost reduction.

Joint ventures become more common in markets where there's a rapidly growing demand and the demand uncertainty is high, as a way to pioneer markets, reduce supply chain bottlenecks and share plant capacity until the critical mass is reached (Harrigan, 1988). It is also a way to create a better response to ever changing demand conditions.

10. Porter's Diamond Model

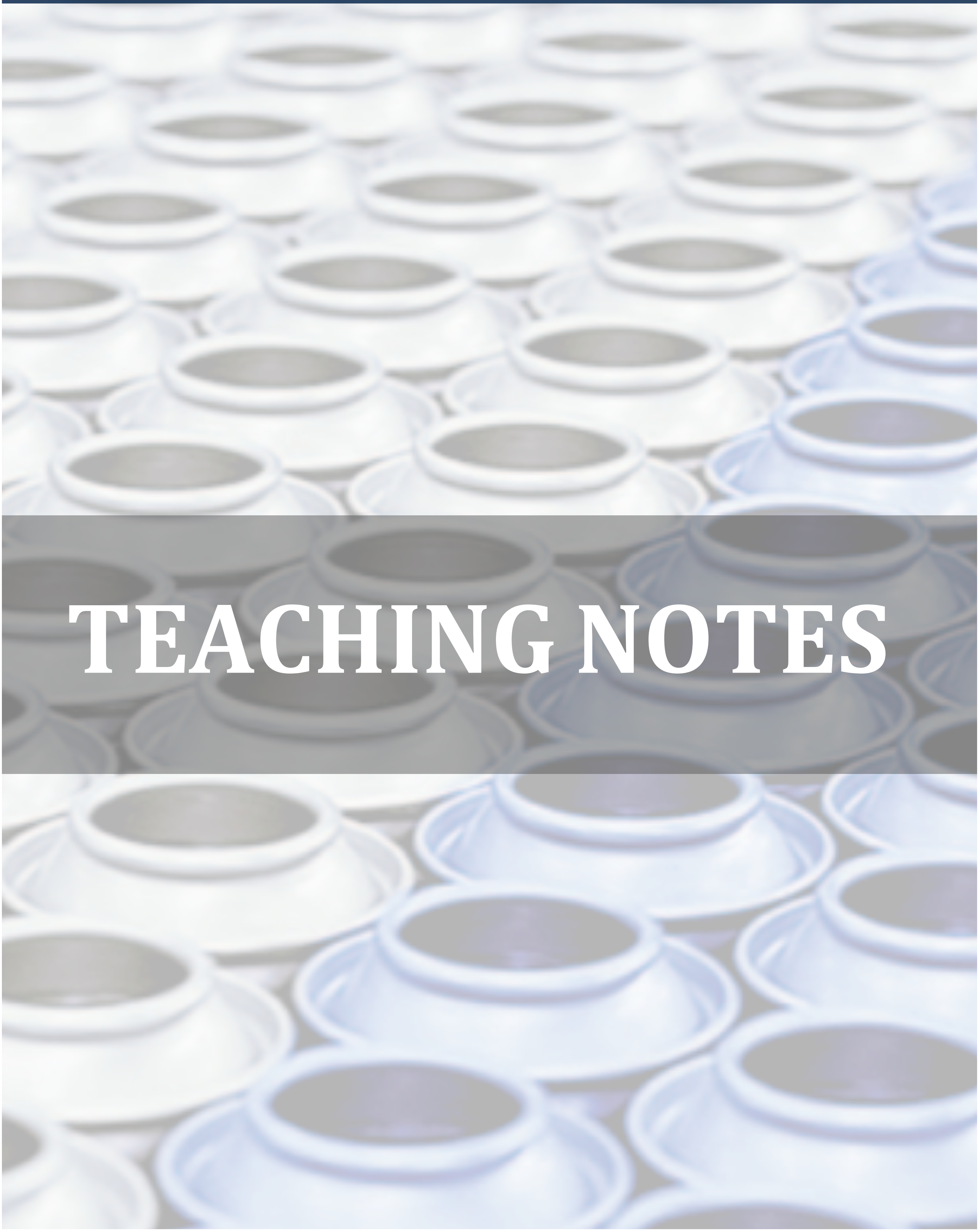
The present model states that a nation's competitiveness is a result of the capacity of its industry to innovate and upgrade. Therefore, organizations are capable of innovation due to four factors that exist in their home market – which constitute the diamond of national advantage (Porter, 1990).

The diamond has four main pillars: factor conditions (i.e. labour force, physical resources and capital), demand conditions, related and supporting industries (i.e. suppliers) and firm strategy, structure and rivalry. It ultimately works as a dynamic system, where each factor has the power to influence the others.

In addition to these four country-specific determinants, there are also two external variables to be taken into account: the role of government (i.e. policies, regulation, standards) and the role of chance (i.e. innovation, entrepreneurship, leadership, etc.).

Companies use the Porter's Diamond Model to understand how they can build competitive advantage locally and then capitalise that same advantage into a global context.

TEACHING NOTES



IV. TEACHING NOTES

1. Introduction

The present case serves as a means to connect relevant theory with the case itself and generate possible solutions for the problems presented in it. Therefore, it should be used for class discussion, along with the proposed questions, that should be made available to the students.

The teaching notes are for teacher's use only and they provide several guidelines on how the latter should conduct the class discussion. Note that they work only as general recommendations, as the questions as subject to different interpretations and the class discussion might follow different paths.

This case study was developed in the end of 2013, so it's only natural that, in time, new ways of analysing and discussing the case may show up, as well as any additional and relevant info.

2. Synopsis

Colep Portugal – Embalagens e Enchimentos S.A. was founded in 1965. As a contract manufacturer, the company offers packaging and filling solutions to its clients (i.e. *Unilever, P&G, Reckitt*), and in the last years it has focused strongly in the aerosol contract-filling segment.

As part of its strategy, Colep always searched for a geographical expansion, as a way to serve its clients in a more direct way (*wherever our clients go, we want to go there with them*). Therefore, throughout the years, the company has done this in two distinct ways: either by acquiring other contract manufacturers or by creating local partnerships/joint ventures whenever it wanted to enter a new market.

By establishing a joint venture with *Provider* and *Total Pack*, which gave origin to CPA, Colep aimed to capitalise the growth in the overall Brazilian market and in particular the increasing demand for aerosol products, which were mainly produced in Argentina.

Although there was a big business opportunity for the company in this market, the company also faced severe challenges, such as supply shortages, increasing inputs costs that endangered the country's competitive advantage and other political and financial technicalities, such as a very complex tax system.

Nonetheless, Colep chose to remain in the market. Where these problems only going to be around on the short-run? Or would they persist and even become more acute? Was it an option to leave and reallocate resources, betting in other countries, such as Mexico? Or was it still profitable, despite all the complications, to keep its operations in Brazil?

3. Teaching objectives

The case presented provides instructors the opportunity to discuss several topics that were taught in previous classes and allows students to apply their knowledge in the resolution of a real-life business challenge.

By addressing several topics such as market potential, partnerships and production constraints, students can apply strategic frameworks and other theories to the resolution of this case. The PEST analysis, the Porter's Five Forces model or the Diamond model are just some of the tools that students should use when discussing the proposed questions.

The case aims to help students understand:

1. How a contract manufacturing company can create value and be competitive in the market, and the need for such companies to have production activities in several countries.
2. The several factors that have to be taken into account when incurring on an expansion project, such as analysing the potential markets' opportunities (i.e. demand growth) and threats (i.e. differences at an economic, financial, social and political environment).
3. What are the main advantages and opportunities in the new market that led that specific market to be chosen.
4. The importance of partnerships and joint ventures in terms of market knowledge and establishing a reputation for the company that enters a new market.

All the data and information that is necessary to the case's resolution is provided in the case and/or the exhibits.

4. Suggested Assignment Questions

The following assignment questions are presented to help the students analyse the case and guide the teacher throughout the case discussion. By applying what they learn during classes, students should be able to provide well-structured answers.

1) *What are Colep's main advantages of vertical integration? And what are the advantages for its clients?*
2) *Do you think that there's any risk for the client when he outsources the filling process? How can this be mitigated, from both Colep's and the client's side?*
3) *Perform an analysis of the Brazilian aerosol industry.*
4) *What are the advantages and disadvantages of the CPA's joint venture established with ZM Participações? How can this be different from CCL case? Is there any underlying conflict of interest that can appear overtime?*
5) *Would you consider that the Brazilian aerosol industry has a competitive advantage at a global scale? How does it affect Colep's expansion strategy in other South American countries?*

5. Analysis and discussion

What are Colep's main advantages of vertical integration? And what are the advantages for its clients?

Colep's advantages

Before Colep started to work under the contract-filling model, it limited itself to the production of plastic and metal containers. When finished, these were sold to its clients, who then were in charge of filling the containers and distributing them to the POS[23]. Colep would receive the inputs necessary to the production of the containers from suppliers, which where then used in the manufacturing process; after that, Colep delivered the product to its clients.

[23] Point of Sale

When Colep introduced contract filling as one of its activities, the company's value chain was increased, as well as the added value of the final product. Just as before, Colep received the raw materials from its clients and manufactured the plastic/metal containers, but the difference now was that, by filling those empty containers, Colep was already producing a final product – meaning that it was ready to reach the final consumer.

Whereas before Colep had to deliver the product to its client, now Colep could also include in its activities a delivery service straight to the POS, which increases even more the value of the product.

This forward vertical integration has clear advantages for the company, such as:

- Differentiation from competitors – by investing in a filling line, Colep was the first company that could integrate both the activities of packaging and filling. Although there are several manufacturers of metal plastic containers components, and contract fillers, there was no other firm in the European market that performed such a wide range of activities of the packaging value chain in house: from lithography to filling and distribution. Therefore, Colep gained competitive advantage over other players and on top of that, it increased its profitability.
- Lower transportation costs – the costs that derive from the transportation of metal and plastic containers to the client were the main barrier to the international expansion of the packaging producers. All in all, the bottles that are transported are empty, but they still take the same space as if they were full. Colep overcomes this barrier by increasing the unitary value of its products (i.e. full aerosol cans), which makes it more feasible to transport at longer distances
- Asset redeployability – the assets that Colep invested in to build its filling lines are non-specific, meaning that they are easily redeployed to other client or product. Colep works for several clients, all of which operate in the same business area. The only thing that distinguishes them from one another is the chemical formulas and the brand itself.

It Colep loses one of its clients, it can quickly re-adjust its production without incurring on any significant costs or losses.

Clients’ advantages

Colep’s vertical integration also brings several advantages to its clients, whom can now outsource most of their activities to just one company, instead of sub-contracting several small companies.

- Intellectual property (IP) protection/reliability – by working with Colep and granting their product formulas only to one company, clients reduce the risk of having their formulas shared or used for other purposes, since it’s easier for clients to control who comes in contact with the formula. At the same time, the long relationships that are developed between Colep and its clients contribute to create trust between the two parties.
- Enhanced product quality – when a client outsources its manufacturing processes to Colep, it allows the latter to take care of the whole production process. Therefore, every value-add steps are conducted and overseen by Colep, which ultimately guarantees the product’s quality standards are met in each step of the production, with minimum costs and high efficiency.
- Lower supply chain costs – by outsourcing the manufacturing activity to just one company, Colep’s clients can reduce several steps in the traditional distribution process, since each of these steps represents an additional mark-up to the product’s final value. Since after the package manufacturing, Colep takes care of the filling, eliminating eventual transportation costs that once occur, from one sub-contractor (Colep, the package manufacturer) to another (contract-filling companies). The distribution to the POS is another step that can be eliminated, since Colep also integrates this process in its value chain.
  In the end, the value of the product is composed by the mark-up of only one service provider, Colep, instead of several small mark-ups from all the sub-contractors, which when added up translate into a greater cost for its client.
- Increase focus on its core business – as the personal and home care products’ industry has reached a mature stage, the competitive advantage of companies no longer relies solely on product differentiation (i.e. the chemical formula), but on cost advantages.

By outsourcing the product manufacturing, companies can focus its resources /human and financial) on the areas that increase revenue and profit – namely Marketing & Sales for these companies, that fight over market share.

- Gain access to technology and flexible capacity – since Colep produce goods for more than two competing companies, it’s equipped with greater production capacity that its clients and therefore, it can respond quickly to increased production requirements. The company can simply adapt to the market demands by changing its orders (more or less), and although terms and costs associated with such changes might change, it’s still more flexible and less costly than a one-time capital investment that could sit idle if the demand decreases.

  At the same time, Colep offers its clients the possibility to produce their products in several sizes and shapes, adapting to its clients’ needs. This wide range of formats might not otherwise be possible for a client to produce in-house, since it requires several investments. However, since Colep’s core business is contract manufacturing and filling, by producing goods for several companies that compete in the same industry, the company can benefit from economies of scale from giving its clients the possibility to choose the product’s characteristics – the production line used to produce package A to client B is the same used to produce package A to client C.

However, it’s also important here to note that the clients like to limit the extent to which they outsource their activities to Colep, in a way that they don’t want to increase the latter’s bargaining power. By resorting to other smaller competitors, Colep’s clients guarantee that they can still have some bargaining power when it comes to price setting and quality standards.

Do you think that there’s any risk for the client when he outsources the filling process? How can this be mitigated, from both Colep’s and the client’s side?

One of the clients’ main concerns could be the fact that the company handles not only its chemical formulas, but also the ones from its competitors. This could eventually generate two kinds of opportunistic behaviours:

- *Colep could start producing and selling the same products to the market, under its own name, when the contract has matured;*
- *The company could share one client's chemical formula with other.*

However, if Colep incurred in such kind of behaviours, it would only benefit from short-term gains. On the long run, its reputation would be damaged and the company would eventually shut down. Therefore, Colep's interest is to generate long-term relationships, build on trust and constant communication

Firstly, it is important to recognize that opportunistic behaviours are diminished in this particular case, due to the fact that we are in the presence of a mature industry. Being so, the competitive advantage of firms no longer relies solely on the exclusive control of know-how, but instead cost-based strategies seem to predominate. Clients only outsource contract filling of products in their maturity or those who are in a declining stage of their life cycle.

The more effort a client exerts in the relationship established with the supplier, the better outcomes they may expect. They key to successful outsourcing is through a good relationship, mutual trust and close intercompany management.

Therefore, there also has to be some commitment from the client's side to this relationship. As Colep increases its production capacity to meet its client demands, there's a transfer of risk from the latter to the former. Therefore, Colep's clients also commit themselves to cooperate until the end of the contract and not to end it unexpectedly.

One way that both the buyer and the supplier have to protect themselves from eventual problems deriving from their contract manufacturing relationship is through the development of a written contract. The latter secures the rights for both sides and is extremely helpful when it comes to setting goals, production targets, schedules, lead-time tolerance limits, etc. It can also include incentives and penalties. The contract should also make clear the type of relationship there will be between the two parties once the outsourcing contract is over.

Perform an analysis of the Brazilian aerosol industry.

To conduct the analysis of the market, we will use three different strategic models/frameworks to identify some of the aerosol market particularities in Brazil.

PEST Analysis

Political & Legal

When analysing the political factors that influence the Brazilian aerosol industry it's important to mention that the Brazilian government has been known for having a bureaucratic and *red tape* type of culture. In the case of Colep, it took them half a year to grant CPA the necessary licenses to start its operations.

At the same time, a lack of transparency and frequent modification of legislation in public institutions makes it difficult for companies to understand the environment that they are working in and often they refrain from their investments. That is why, in most cases, foreign companies prefer to enter the market through a joint venture. By having local partners with better knowledge on how the system works, they can protect themselves from such mishaps.

The government's impositions of tariffs on certain imports and its protectionism policy also has a huge impact on the industry. As some companies feel the need to resort to external suppliers to source their activities, they face huge costs and technicalities associated with barriers and customs, which contributes to a loss of competitiveness, both in price and effectiveness in responding to the market needs.

In regards to the legal factors, Brazil is nowadays one of the countries that most contributes to the *greenhouse effect*, with increasing levels of carbon emissions. In the past few years, in an attempt to reduce this, Brazil's government has led on the National Environmental Policy (NEP) in order to establish standards for cleaner production and offer incentives to companies that comply with those standards.

Economical

Aerosol companies that want to enter the Brazilian market have to take into account several factors. With an increased GDP growth, which contradicts the tendency registered in European countries, new opportunities rise for aerosol companies in

Brazil. Higher levels of disposable income, low unemployment rates and increasing consumer awareness towards personal health and, led to an overall increase in the consumption of personal, beauty and homecare products. As more citizens move up on the social scale, from classes D and E to middle and upper classes, they have more money to spend on products with a better *product-price performance*, such as the aerosol ones.

As the country works as a very closed economy, the only way that companies have to enter the market is mainly through joint ventures or M&A's with small, local players, who want to enter the aerosol market, but lack financial resources.

The need to enter the Brazilian market comes not only from the recognition of a market opportunity but also from the pressure that the clients put on aerosol manufacturers. Since there's a huge market to serve in Brazil, with a lack of local sourcing, and Argentina is living a period of political instability, clients want companies such as Colep to build their manufacturing facilities on site, which ultimately reduces the unitary cost (by eliminating transportation costs from the value chain).

However, aerosol-manufacturing companies encounter several difficulties when entering this specific market, namely high interest rates that impend them from borrowing – which ultimately reduces investment levels. As the high inflation rate pushes interest rates up, it also leads to higher prices of inputs (raw materials and labour force) and a consequent loss of competitiveness of the Brazilian companies.

Social & Cultural

As a result of increasingly better living conditions, Brazilian consumers have changed their consumption patterns. As they benefit from higher levels of disposable income, greater education and information about products available in the market, consumers can now opt for better products, such as the aerosol ones.

Although this is not a recent trend, the Brazilian population always paid great attention to their personal hygiene. As it is embedded in their culture, the personal care and beauty market registered an exponential growth in the past few years, a growth that was capitalised by the aerosol industry.

Technological

Aerosol-manufacturing companies invest heavily on R&D to find ways to increase their productivity and deliver the best products to their clients. Aerosol-filling contract manufacturers tend to invest in several activities, such as formulation development, to help their clients test their products' formulas and optimise them for aerosol application.

The BOV system is a clear example of a new technology that helped manufacturers achieve better results in terms of can efficiency, without using *greenhouse gases* in their production.

Environmental

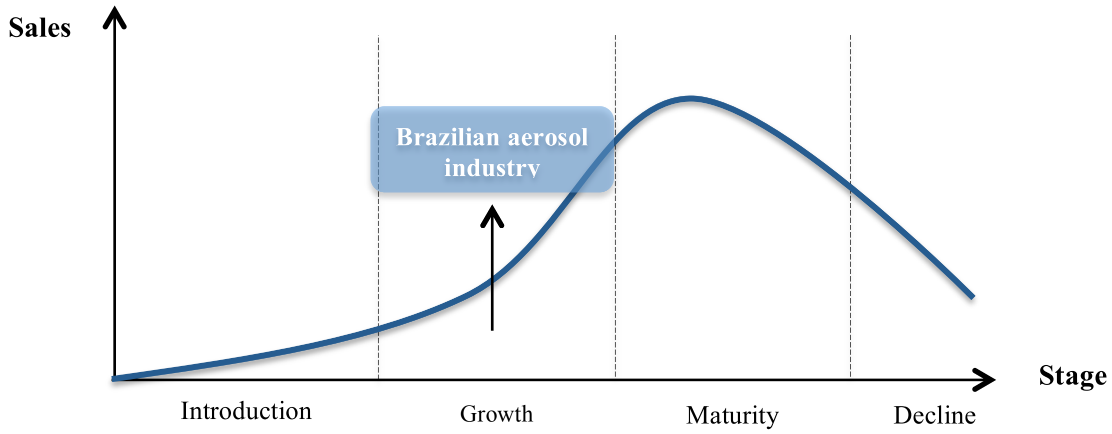
Most of the investments that have been carried by aerosol contract manufacturing companies in the past few years have derived from the fact that these same companies need to improve their production processes to make them more environmentally friendly. Due to several environmental and health risks associated with the use of propellants in aerosol products have led to a steady growth in the industry. This eventually led aerosol-manufacturing companies to switch from CFCs to HCFCs, nitrogen and compressed air, promoting eco-friendly aerosol propellants

The majority of the aerosol companies that have entered the Brazilian market already use good environmental practices (i.e. HCFCs and recyclable packages). However, there's much work to be done, since the production process isn't completely pollution-free; although HCFCs do not cause as much harm as CFCs, they're still contributing to the depletion of the ozone layer.

To summarize this analysis, the next page presents a graphical overview of all that was mentioned above – the main trends that are relevant for the aerosol industry and how each trend particularly affects the industry.

Context	Trend	Impact	
		Positive	Negative
Political & Legal	▪ Bureaucracy and *red tape* culture ▪ Frequent changes in legislation ▪ Complex tax system ▪ *National Environmental Policy* (NEP) ▪ Protectionism	- Offer incentives to companies that promote green production practices	- Unstable environment for companies to operate in - Increases costs associated with tariff barriers and customs
Economical	▪ Growing GDP ▪ Increasing levels of disposable income ▪ Decreasing unemployment rates ▪ Tight access to financing and high interest rates ▪ High inflation	- Increases the levels of consumption of aerosol products	- Difficult for companies to invest in developing/ expanding their activities - Higher input costs (i.e. labour, capital and raw materials
Social & Cultural	▪ Growing population ▪ Consumers are more informed ▪ Personal hygiene carries great value for the Brazilian population	- Increased awareness - Switching from other low value products to aerosol products	
Technological	▪ Investment in R&D to increase productivity and widen range of services ▪ BOV	- Increase product quality and efficiency - Cost savings through economies of scale	
Environmental	▪ New techniques involving HCFC gases	- Reduction of the impact on the ozone layer and on public health	

Industry Life Cycle



When we analyse the industry life cycle of the aerosol industry in Brazil we can conclude that it is still in a very early stage of growth.

Although aerosol products are not new to the market in general, they are only now reaching a significant volume of sales, as a result of increasing levels of disposable income of the Brazilian population. As the market volume grows, there's a strong need for the country to import aerosol products manufactured by its neighbours (i.e. Argentina) to cover the excess demand. Nowadays, there is a small number of players in the market – especially those who operate in Colep's segment (i.e. aerosol filling), but this number is expected to grow as the market becomes too good of an opportunity to dismiss.

Although consumption levels are rising across the country, it is still expected that the market will remain on a growth phase for a while, as there is still a large chunk of the population (namely classes D and E) that will eventually switch from liquid products to aerosol ones. This will both be facilitated by the increasing levels of income and by the expected increase of manufacturers in the market, which will increase supply and bring prices down, making aerosol products more accessible to lower social classes.

Porter's Five Forces

Threat of new entrants

To properly assess the threat of new entrants in the aerosol industry there are several variables that have to be taken into account.

First of all, **economies of scale** play an important role when making a decision to enter this particular industry. As contract fillers increase their levels of production, they can benefit from lower unit costs. It is difficult for small and new players to enter the market and have a significant number of orders from their clients to benefit from economies of scale and thus be competitive.

As Colep was one of the first companies to enter the contract filling industry in Brazil and it already have a long list of clients, it enjoys low production costs for every unit it produces.

At the same time, the **capital requirements** can also be considered as high in this industry. Most players in the market are small and do not carry enough financial resources to invest in new aerosol filling facilities. There are also **certification requirements**, such as good manufacturing practices, quality management standards, compliance costs and other industry standards that companies can only attain if their production facilities fulfil certain requisites, which most of the times can only be achieved through investments that aim to improve manufacturing conditions.

Companies that have been operating in the aerosol industry already carry valuable **know-how and experience** on their operations and product quality standards that are easily redeployable each time they build new manufacturing facilities. This is one of the reasons why European companies, such as Colep, can have some leverage over Brazilian companies in the particular case of the aerosol industry.

Brand equity too plays an important role in the company's positioning inside the aerosol industry. In an industry were the clients outsource their manufacturing activities and give away their products' formulas, it's important that there is some recognition from the clients side and that there's also a mutual trust relationship between the two parties.

Contract manufacturers, like Colep, that carry high quality standards and industry certifications usually develop long-term relationships with their clients, following the latter in every market they operate. This ultimately creates **switching costs** for the clients in a way that if the latter wants to switch from one contract manufacturer to another, it will have to bear the uncertainty that a new client-manufacturer relationship might bring – lower product quality, risk of confidential breaches related to the product formula, lack of communication, etc.

All in all, if we were to assess the threat of new entrants we would consider it as being medium to low, since it's not easy to enter the aerosol filling industry, due to its particularities. This is not exclusive to the Brazilian market, but happens in all other countries in this particular industry. Companies are required to have reputation when it comes to quality and product certifications/standards and the manufacturing facilities call for heavy capital investments.

However, it's easier for firms to enter the industry when they already have some sort of knowledge, as is the case of *Fareva* that entered the Brazilian market at the same time that Colep.

Other foreign competitors, such as *Exal*, can also consider the possibility to enter the Brazilian market, as the Argentinian one registers a decline; but this would require moving their facilities from one country to another and although it isn't impossible, it's very costly.

Although *Exal's* future strategy might include moving to Brazil, it chooses to keep its operations in Argentina for now, as the Brazilian market still does most of its aerosol product-sourcing from its neighbour country.

Threat of substitutes

The biggest substitute that we can find in the market for aerosol products are, as mentioned in the case, the liquid ones. Aerosol products are more expensive than liquid ones (taking the example of deodorants) and they are only accessible to a part of the population. As liquid products perform the same function at a lower price, they still represent a large chunk of the market's consumption. However, and since aerosol products offer a better price-performance ratio, as the market grows and the overall income of the population increases, it's only natural that aerosol products will become the first choice of Brazilian citizens.

It could also be interesting to mention than it has been registered a growing concern in the society for environmental issues and protection. Aerosol products in particular were many times taken as harmful for the ozone layer, since they contained CFC's propellants. As a result, many consumers decided to switch from *spray deodorants* (aerosol) to *roll-on deodorants* (liquid).

However, since the late 90's, most of the companies switched to HCFC's[24], which are less harmful to the ozone, but highly flammable. As consumers become more informed on the improvement of the composition of aerosol products in order to reduce the impact on the environment, and since the former have greater quality, they eventually return to buying aerosol products instead of liquid ones

Therefore, the threat of substitutes can be considered as low.

Bargaining power of suppliers

The main suppliers of aerosol companies are those who provide empty aerosol cans and other small components – such as *Cia. Metalúrgica Prada, Lindal* and *Exal*, and the gas providers (*Petrobras* and *Ultragaz*). Whereas in the first case there are a lot of players, both in Brazil and Argentina, making the market more competitive by setting lower prices, the gas market works as a duopoly. Since there are only two companies, aerosol contract manufacturers do not have the power to influence gas prices. Therefore, the bargaining power of suppliers can be seen as medium.

Bargaining power of buyers (clients)

There can be two sides when it comes to the power of buyers. On one hand, as we have seen in the case, clients enjoy keeping small competitors alive in the market by placing orders to the latters. In this way, they make sure that the market is more competitive and that major contract manufacturers have to offer lower prices, in order to compete with smaller players. As mentioned in the case, clients carry this type of behaviour due to a matter of internal organizational processes. They resort to several manufacturers to justify the importance and existence of an outsourcing department. However, in time, this will prove very costly and inefficient, and clients ultimately realize that is cheaper and more effective to grant the whole production process to just one manufacturer. This is why the bargaining power of buyers can be considered as medium.

Industry rivalry

Although there are a small number of players operating in the Brazilian aerosol

[24] Hydrochlorofluorocarbons

industry (being the most important ones Colep and *Fareva*), the market exhibits a huge growth over the last few years, which means that there is still space in the market for the two companies to operate simultaneously and still be able to make profits. Entering a market such as this one also requires a huge capital investment, which makes it harder for smaller players to enter and create more competition.

Drawing this analysis to a close, we can say that the aerosol industry in Brazil has a high level of attractiveness, since all of the five forces analysed above are either medium and/or low and the industry is still in its growth phase. Therefore, aerosol-filling contract manufacturers that are currently operating in the Brazilian market can expect other competitors to enter the market on the long run.

Overall, the industry rivalry can be considered to be medium to low.

What are the advantages and disadvantages of the CPA's joint venture established with ZM Participações? How can this be different from CCL case? Is there any underlying conflict of interest that can appear overtime?

The joint venture (JV) established between Colep and *Provider*/*Total Pack*, which gave origin to CPA, brought several advantages to the company, such as:

- *Access to the Brazilian market*
- *Established distribution networks*
- *New clients*
- *Increased resources*
- *Better bidding and negotiating (i.e. labour force, suppliers, government)*
- *Shared costs and risk*

Through this JV, Colep was able to access a wide range of customers and clients that it didn't have access before. By leveraging *Provider* and *Total Pack's* knowledge on the local market, Colep was able to develop a strategy for its operations that would suit the market needs.

Since the Brazilian companies already held a wide list of clients, including companies such as *L'Óreal* and *O Boticário*, the JV allowed Colep to be recognised as a trustworthy and reliable partner. As a result, in the first year of operations, several companies demonstrated their interest in working with CPA and having it producing their aerosol products.

Both *Provider* and *Total Pack* had already a fully developed logistics network for their product's distribution and delivery to the final client. Since the three companies manufactured products for the same companies most of the times, they could incur on economies of scope in distribution.

The JV also allows the local partners to share their knowledge on the business practices of the local market, providing their insight on several aspects such labour costs (i.e. union labours and other burden expenses). *Provider/Total Pack* may also be familiar with local suppliers and pricing of equipment (that can ultimately grant the company better bidding and bargaining conditions when acquiring supplies), as well as local laws and bureaucracies.

Last but not least, the JV allows Colep to share the risk, liabilities and costs of the new project with its new partners, so that it doesn't have to carry the burden of the CPA's greenfield investment all by itself.

However, there might be some drawbacks that may appear overtime, as the JV becomes more mature, including:

- *Lack of communication*
- *Divergent strategies*
- *Loss of control*
- *Imbalanced resources*
- *Cultural differences*

If the parties, namely Colep and *Provider/Total Pack,* don't communicate their objectives clearly to one another there can be a risk of misunderstanding. As the firms may carry different goals and strategies for the JV, they may fail to reach a set of mutually agreeable objectives.

Being part of a joint venture isn't the same has having full control over the newly formed company. Although Colep is the major stakeholder, holding a 51% interest stake in CPA, it still has to discuss its strategies with its JV partners and struggle to reach a common ground. Although there don't seem to be many cultural differences at a first glance between Portuguese and Brazilians, they've two very distinct ways of working and carrying their businesses.

This can be a problem in terms of corporate culture, which can unravel itself at several levels: accounting, financing, HR, etc. Divergent management styles can also result in poor integration and cooperation.

The joint venture with *ZM Participações* was different from the *CCL Industries*. While *ZM* joined forces with Colep to create a partnership that will allow the former to enter the aerosol market (by taking advantage of Colep's business knowledge, expertise and financial strength), *CCL* created a strategic partnership were it could, in time, abandon the contract manufacturing business, by slowly releasing the control of their European activities to Colep.

There is, in fact, a risk of conflict of interest in this joint venture that will become clearer in the long term. As *ZM Participações* and Colep joined forces to create *CPA*, they also agreed on keeping both *Provider* and *Total Pack's* manufacturing activities, namely the contract filling of personal and home care liquid products.

When speaking of deodorants, for example, *Provider* and CPA are both **competitors** – as the former sells cream/liquid deodorants, the latter sells spray (aerosol) deodorants.

The rationale behind the decision of keeping the production for both segments, as mentioned in the case, has to do with the fact that although the Brazilian population has been registering increasing levels of disposable income, there's still a huge parcel of the population (classes D and E) that buys inferior quality deodorants – the liquid ones.

At the same time, the part of the population that has moved up from lower end classes to the so-called middle class (class C) has switched its consumption patterns, from liquid to spray deodorants, which justifies the increasing demand and the need for local producers to supply the home market and reduce external dependency.

Over time, there are some segments – and such is the case of the deodorants, that will eventually disappear from *Provider* and *Total Pack's* portfolio, as the aerosol products, considered as a premium segment, will cannibalize some of the liquid ones.

In addition to what was said above, Colep also has to consider the risk that is associated with the **transfer of know-how** in the aerosol industry. Although one of the main reasons that contributed to the creation of this partnership was Colep's knowledge of the aerosol industry, this can become a trap for the company. In time, *Provider/Total Pack* can learn Colep's processes, operations and other practices and can ultimately use it in their own interest once the JV is over, becoming a fierce competitor for Colep.

Would you consider that the Brazilian aerosol industry has a competitive advantage at a global scale? How does it affect Colep's expansion strategy in other South American countries?

To come up with a final answer to this question, students should conduct an analysis of the Brazilian country based on the Porter's Diamond Model of Competitive Advantage. Only then should they draw conclusions about the market competitiveness.

Although the case study does not provide all the information needed to cover every single aspect that the diamond addresses, the following analysis considers several topics that affect the industry's international competitiveness.

Porter's Diamond Model

Factor conditions

In terms of **labour force**, there are two factors that are very important to mention. On a first note, Brazil ranks very poorly when it comes to the education of its population, being considered as the 7th most problematic factor for doing business in the country. Despite the government efforts in past years to improve this situation, there's still a long way to go. Although the work force might be abundant, it lacks quality in education, which is essential to enhance the country's efficiency and competitiveness.

Secondly, the minimum wage law creates a distortion in the market by making companies increase their workers' salaries every year by a rate superior to the inflation levels of that same year. In that way, the labour force becomes more and more expensive every year. For manufacturing companies as Colep, where most of the costs are labour-driven, this can generate a lack of competitiveness.

Last but not least, when it comes to **capital and financing**, the constant increases of the interest rates (and spreads), in an effort to detain the yearly inflation growth, make it hard for companies to borrow from Brazilian financial institutions.

We can conclude that the Brazilian market may have some advantages when it comes to basic inputs (i.e. abundant work force, energy). However, in the past few years, the country has failed to capitalize these resources by (not) developing advanced factors – such as infrastructures and education, to increase the efficiency and competitiveness of its inputs.

Demand conditions

As mentioned in the case, by the year of 2009 there was an overall consumption of 545 million aerosol units, of which only 57% of those units were produced internally. From 1998, the country registered a growth in the consumption of these products of about 215% and the prospects show that the market still has great space to grow even further.

As disposable income levels registered substantial growth over the past few years, redesigning the way that the Brazilian population is distributed through social classes, a new middle class is emerging: one which is more educated and informed and benefits from greater purchasing power. As a result, there's an increased demand for aerosol products (especially in the personal care segment), in detriment of liquid products.

In conclusion, we can say that Brazilian consumers will become more and more sophisticated, as they climb on the social scale and switch to higher quality products. Companies will ultimately feel the need to innovate and competition will be more intense. However, and for what concerns the present, international demand does not play a defining role, since the Brazilian aerosol industry is still focusing on supplying the local market.

Related and supporting industries

Until recent years, Argentinian companies (such as *Exal*) were the main suppliers of the Brazilian aerosol market when it came to empty cans and other components. This was mainly due to their proximity and the lack of local companies that could serve the entire market.

As the aerosol market registers and exponential growth, new suppliers are making their entrance into the market, such as *Lindal* (valves, actuators and spray caps) and

Cia. Metalúrgica Prada and *Impacta* (empty aerosol cans).

As the market is in a early stage, apart from multinational companies and other established Argentinian suppliers, local suppliers are still very small. Most of the times they lack the capacity and structure to supply aerosol manufacturers and do not benefit from economies of scale, which would allow them to serve the market with more competitive prices. As a result, contract manufacturers have to resort to European suppliers to source their activities. Ultimately, this means that companies will have to deal with tariff barriers, customs' inefficiency and additional costs derived from transportation.

When it comes to gas suppliers, the fact that the market is controlled by only two companies does not favour contract manufacturing companies – as the competition is very little or none, both gas suppliers do not feel the pressure to innovate or to lower their prices.

Firm strategy, structure and rivalry

Currently, there are a very small number of companies operating in the aerosol industry in Brazil. Since the cannibalization phenomena (from liquid to aerosol products) is turning to be somewhat recent, most of the companies that were already operating in the market only focused on other segments. As they are all small companies (generally family-owned), they lacked the means and resources to invest in the aerosol segment.

European companies that already had knowledge on the aerosol manufacturing process – such as Colep and *Fareva,* entered the market through joint ventures as a way to seize the market opportunity that was being overlooked by other companies. Right now, these are the only two players that operate in the aerosol industry.

In terms of rivalry, it can be considered as low, since these two companies operate alone in the market. And since demand is very high for the existing levels of supply, there's still space for both firms to grow simultaneously in the market.

The role of government

The government also plays an important role in determining the national competitiveness of a particular industry. Despite the recent efforts of supporting “green” aerosol companies, there are still many impediments that the government poses to companies through its national policies, as is the case of the bureaucracy and red tape culture of public institutions, a very complex tax system, ever-changing and unstable policies, and so on.

After the analysis conducted above through the *Porter’s Diamond Model*, it’s important to understand that the Brazilian economy has registered an exponential growth in the past few years, which has increased both consumption and the lifestyle of Brazilian citizens. Nonetheless, there are several factors, such as infrastructures, tax reform and labour market policies that the government must take care to ensure a sustainable growth in the future.

High inflation and sustained yearly increases in the minimum wage are aspects of the economy that affect almost equally all the companies and supress the country’s capacity to grow at a faster rate.

Despite facing supply sided constraints, high interest rates and a complex tax system, Colep considers the Brazilian market too big of an opportunity to let it pass by. As there are few companies operating in the aerosol industry, the fact that Colep has a low OTIF on its clients’ orders isn’t very worrisome for now from the company’s point of view. There’s a huge demand for aerosol products and its clients are in a stage were they just want to make sure that they can cover at least part of the market.

However, if we were to consider the competitiveness of the Brazilian aerosol industry at a worldwide level, and taking into consideration what was mentioned in the previous analysis, it’s clear that this particular industry does not gather all the necessary conditions to be competitive with other European, North American or Asian similar industries.

There are several reasons for which competitive advantage hasn’t yet been considered as a priority for companies that operate in the Brazilian aerosol market:

- *Aerosol cans are not a high value added product, thus the transportation costs (if needed) represent a large parcel of the overall cost;*
- *Increasing levels of demand, which leaves no space for Brazil to export any of its internally produced aerosol cans;*

- *Blue-chip clients are ceasing their operations in Argentina due to political instability. As the country works as Brazil's main aerosol supplier, clients resort to contract-manufacturers that have their facilities in Brazil in order to serve the market.*

The lack of competitive advantage of the Brazilian industry will drive Colep to redefine its strategy in the South American continent. If in the future, the company should consider covering other markets besides Brazil, it will ultimately have to invest in local operations, instead of exporting its products from one country to the other.

Factors such as increased labour costs, for example, would make the aerosol products highly uncompetitive if sold on surrounding economies, such as Colombia or Mexico. Whereas in Brazil the prices and salaries increase almost simultaneously (salary increases usually cover the annual inflation), making it possible for Colep to reflect the labour costs in the final price to its clients, this would be different in other countries; either Colep would not sell any of its products or it would have to sell them below cost.

As we have seen, Colep has already expanded its activities to Mexico, a country that offers extremely low shop-floor labour costs and has registered a 3.9% GDP growth in 2012, compared to Brazil's 0.9% in that same year. The Mexico operations will allow Colep to serve other North American markets, such as the USA and Canada, in a way that's even more competitive than if the company produced locally for those markets.

In the end, we can conclude that the operations in Brazil do not carry any strategic value in terms of international expansion through exports. By building its manufacturing facilities in the country, Colep only intends to take advantage of its growth opportunities, with the entire production aiming to cover the domestic demand.

V. CONCLUSION

General

After a careful analysis of several countries, Colep decided to expand its aerosol-manufacturing activities to Brazil. As the European market was becoming too saturated and margins were being crushed due to intense competition and the maturity phase in which the industry was in, the Brazilian market presented valuable opportunities that were too good to be dismissed: a growing economy, increased levels of disposable income and the possibility for a joint venture with two local companies.

Despite the attractiveness of the aerosol market and its growth prospects due to the expected increase in consumption from the rising middle class, the market presented several challenges; from supply constraints to heavy bureaucracy, a complex tax system, a tight access to financing and increasing salaries, Colep found itself smothered by a set of conditions that the market failed to provide.

The main question that this case study intends to analyze is the extent to which the Brazilian market will still be competitive and advantageous for Colep, given the numerous constraints and emerging opportunities provided in other markets, such as Mexico, for example.

All in all, after developing appropriate responses to all five questions, Colep chooses to maintain its operations in Brazil. Regardless of not being able to serve the market to the extent the company would like to, it is still a great business opportunity (even as it is right now) due to the size of the market and its expected growth.

Personal opinion

In my opinion, the development of the presented case study was extremely valuable. On one hand, it allowed me to gain knowledge about a company – Colep, and an industry (aerosol contract manufacturing) of which I had had no previous contact. Despite being a Portuguese company, Colep is not widely recognized as other major national companies with operations overseas – but it has reached incredible growth levels over the past few years, with numerous expansions to other countries.

On the other hand, having the possibility to study the Brazilian market was definitely a plus. Being one of the major world economies nowadays, it was interesting to analyze the country's main problems that multinational companies face upon entering the market.

Apart from the case study itself, writing the teaching notes, which could eventually be used in a class room, helped me understand how strategic frameworks and other theories can apply to a real life situation, such as this one, and help a manager identify his main challenges. Ultimately, this will contribute to create a better response to any existent challenges and capitalize the market opportunities.

Limitations

One of the first challenges that I encompassed when starting my thesis was the choice of a particular company and a real life problem that the latter was/had faced that was worth studying and writing about.

After choosing Colep, there were some difficulties related with time constraints (i.e. thesis delivery deadlines) and lack of available information. Most of the information presented on this case study comes from meetings with the group's CEO, since relevant data for the case is not widely available. However, and due to Colep's newest projects in both Mexico and the UAE, it became very difficult to schedule meetings with Dr. Henrique Santos to collect additional information that I needed to continue with the case writing.

Also, there were some challenges associated with the teaching notes, particularly when it came to defining the market that was relevant to analyze and apply the strategic frameworks.

Overall, there is not much information on the contract manufacturing industry. Most of the times, it was complicated to understand how it worked – from logistics to its business model, which required an extensive research. However, the aerosol CM industry has several particularities that other CM industries do not have. Once again, the most reliable source that I had was Dr. Henrique Santos.

VI. REFERENCES

Atradius Country Report. *Brazil – November 2012*. Retrieved from www.global.atradius.com

Bamford, J., D. Ernst and D. G. Fubini (2004). *Launching a World-class Joint Venture*. Harvard Business Review, Vol. 82, Iss: 2, pp. 91-100

Blanchette, M. (2004). *Strategic Fit Counts More Than Cost When Choosing Offshore Contract Manufcturer.* World Trade, Vol. 17, No.6, pp. 48-52

Child, J., D. Faulkner and S. Tallman (2005). *Strategies of Cooperation: Managing Alliances, Networks and Joint Ventures*. Oxford University Press (USA), 2nd Edition

Derco, S. V. and S. M. Fromm (2010). *The Benefits and the Pitfalls of the Joint Venture*. Retrieved from http://www.smf-cpa.com/

Fan, Y. (2000). *Strategic Outsourcing: Evidence from British companies. Marketing Intelligence and Planning,* Vol. 18, Iss: 4, pp. 213-219

Favreau. M. K. (2007). *An Evaluation Of American Companies That Outsource Manufacturing To China: Decision-Making And Performance.* Brigham Young University Library

Ferreira, M. (2007). *Vertical Integration for Full Outsourcing and Internationalization of a Portuguese packaging firm*. Instituto Politécnico de Leiria (IPL)

Ferreira, M. (2007). *Governance Models in Mature Industries: case studies of three Portuguese packaging firms.* Instituto Politécnico de Leiria (IPL)

Franceschini, F., M. Galetto, A. Pignatelli and M. Varetto (2003). *Outsourcing: Guidelines for a Structured Approach*. Benchmarking: An International Journal, Vol. 10, Iss: 3, pp. 246-260

Fronmueller, M. P. and R. Reed (1996). *The Competitive Advantage potential of Vertical Integration*. Omega Journal, Vol. 24, Iss: 6, pp. 615-733

Harrigan, K. R. (1988). *Joint Ventures and Competitive Strategy*. Strategic Management Journal, Vol. 9, Iss: 2, pp. 141-158

Henry, A. E. (2008). *Understanding Strategic Management*. Oxford University Press, 2nd Edition

Heikkilä, J. and C. Cordon (2002). *Outsourcing: a core or non-core strategic management decision?* Startegic change, Vol. 11, Iss: 4, pp. 183-193

Jennings, D. (2002). *Strategic sourcing: benefits, problems and a contextual model*. Management Decision, Vol. 40, Iss: 1, pp. 26-34

Kemp, R. G. M. (1994). *Managing the Dynamics of Joint Ventures: a longitudinal study*. Retrieved from www.escholar.manchester.ac.uk

Kim, B. (2003). *Dynamic outsourcing to contract manufacturers with different capabilities of reducing the supply cost*. International Journal of Production Economics, Iss: 68, pp. 63-80

KPMG International (2009). *Joint ventures – A tool for growth during an economic downturn*. Retrieved from www.kpmg.com

Lonsdale, C. (1999). *Effectively managing vertical supply relationships: a risk management model for outsourcing*. Supply Chain Management: An International Journal, Vol. 4, Iss: 4, pp. 176-183

McIvor, R. (2000). *A practical framework for understanding the outsourcing process*. Supply Chain Management: An International Journal, Vol. 5, Iss: 1, pp. 22-36

Momme, J. and H.-H. Hvolby (2002). *An outsourcing framework: action research in the heavy industry sector.* European Journal of Purchasing & supply Management, Vol. 8, Iss: 4, pp. 185-196

OECD Economic Surveys Brazil (2013). Retrieved from www.oecd.com

Porter, M. E. (1979). *How Competitive Forces Shape Strategy*. Harvard Business Review, Vol. 57, Iss: 2, pp. 137-145

Porter, M. E. (1980). *Competitive Strategy: Techniques for Analysing Industries and Competitors*. The Free Press (New York)

Porter, M. E. (1990). *The Competitive Advantage of Nations*. Harvard Business Review, Vol. 68, Iss: 2, pp. 73-91

Sabol, A. (2013). *The concept of Industry Life Cycle and Development of Business Strategies. Management*. Active Citizenship by Knowledge Management & Innovation: Proceedings of the Management, Knowledge and Learning International Conference 2013, pp. 635-642

Schwab, K. (2013). *The Global Competitiveness Report 2013-2014*. Retrieved from www.weforum.org

Terjesen, S. (2010). *Joint Ventures: Synergies and Benefits*. Retrieved from www.qfinance.com

Valkonen, H. (2009). *The Contract Manufacturing Process in food industry*. Helsinki University of Technology

Wallace, Robert L. (2004). *Strategic Partnerships: An Entrepreneur's Guide to Joint Ventures and Alliances*. Dearborn Trade Publishing (USA), 1st Edition

Zhu, Z., Hsu, K. and Lillie, J. (2001). *Outsourcing – a strategic move: the process and the ingredients for success*. Management Decision, Vol. 39, Iss: 5, pp. 373-378

http://www.aerosolproducts.org/

http://www.aboutaerosols.com/

http://www.colep.com

http://www.cpa.ind.br

http://www.rar.com