FUNDAÇÃO GETÚLIO VARGAS
ESCOLA DE ADMINISTRAÇÃO DE EMPRESAS DE SÃO PAULO

BAPTISTE JEAN JEFFREY PELLETIER

INTERNATIONALIZATION OF SME AND ENTRY MODE CHOICE IN BRAZIL: THE CASE STUDY OF AMECO, A FRENCH SME

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Dissertação apresentada à Escola de Administração de Empresas de São Paulo da Fundação Getúlio Vargas, como requisito para obtenção do título de Mestre Profissional em Gestão Internacional.

Campo do Conhecimento:
Gestão e Competitividade em Empresas Globais

Orientador Profª. Drª. SUSANA CARLA FARIAS PEREIRA

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Profª. Drª. SUSANA CARLA FARIAS PEREIRA (ORIENTADOR)

_____
Prof. Dr. LUIS HENRIQUE PEREIRA

_____
Prof. Dr. GUSTAVO MENONCIN DE CARVALHO PEREIRA

Resumo

O objetivo da pesquisa é analisar, para uma PME francesa, a atratividade de dois mercados-alvo no Brasil, a fim de apoiar a tomada de decisão do CEO sobre o investimento futuro. Para enfrentar a crise da União Europeia, muitas PMEs francesas estão procurando novas oportunidades em todo o mundo, especialmente nos países BRIC. Na verdade, o Brasil parece ser um mercado promissor, oferecendo inúmeras oportunidades de crescimento. No entanto, em comparação com as empresas multinacionais tradicionais, as PMEs têm de lidar com a falta de recursos e de poder de mercado. Ir global é arriscado e caro para as PMEs; o que implica avaliar cuidadosamente a viabilidade da implementação de um investimento estrangeiro. A análise revelou que o Brasil é um mercado de aproximadamente 30 milhões de euros, nos próximos 10 anos. Este é definitivamente um mercado promissor para uma empresa como AMECO. Levando em conta esses critérios, AMECO deve abrir um escritório de representação no próximo ano para angariar novos clientes e assinar novos contratos.

Palavras-chave: PMEs, estratégia, internacionalização, a França eo Brasil

Abstract

The research's goal is to analyze, for a French SME, the attractiveness of two target markets in Brazil in order to support the CEO's decision making on future investment. To face EU crisis, many French SMEs are currently seeking new opportunities around the world, especially in the BRIC countries. In fact, Brazil appears to be a promising market, offering numerous opportunities for growth. However, compared to traditional MNEs, SMEs have to deal with a lack of capabilities, market power and other resources. Going global is thus risky and costly for SMEs, which implies to evaluate carefully the viability of a foreign implementation. The analysis has revealed that Brazil is a market of approximately 30 million euros for the next 10 years. This is definitely a promising market for a company like AMECO. Taking into account these criteria, AMECO should open a representation office in the following year to canvass new clients and sign new contracts.

Key words: SMEs, strategy, internationalization, France and Brazil

TABLE OF CONTENTS

1. INTRODUCTION

1.1. THE CHOICE OF A CASE STUDY

Two options were available for the writing of this thesis, either an academic thesis or a professional thesis. The choice has been made to analyze a case study, and this is why this thesis is very similar to a consulting project. A few reasons have led to this choice:

- Firstly, because after two years of a master degree and many case studies made in class, it was interesting to conclude with a final case.
- Secondly, it was the real opportunity to help an existing company with its current issues, exactly as a consultant could have done.
- Thirdly, this thesis could help other SMEs, which wish to invest in Brazil, enabling them to draw on the work already made and facilitate their process.

1.2. THE CHOICE OF THE TOPIC

The idea of this thesis was found during the completion of an internship at ALTIOS International's Brazilian subsidiary. ALTIOS International, founded in 1991 in Nantes (France), is a private company specialized in supporting the international development of Small and Medium Enterprises[1] around the world. ALTIOS is the French leader in international business support for SMEs. They employ eighty consultants; have ten branches (USA, Mexico, Brazil, Russia, India, China, Australia, Czech Republic, Poland and France) and they can count on a network of partners in eighty countries.

Among others, the author has participated in a mission between March and April 2012 to support a French SME, AMECO, which wishes to assess the Brazilian market. The job was to organize a week of interviews with Brazilian managers for the head of business development. The goal was simply to have a first idea of the market potential with a view to future development in the country. AMECO's management had preconceived ideas about Brazil, and wanted to verify these statements. The interest

[1]In this thesis, the definition used for a Small and Medium Enterprises comes from *l'Institut National de la Statistique et des Etudes Economiques* (INSEE), the agency responsible for the production, analysis and dissemination of official statistics in France. The category of SMEs is made up of enterprises which employ fewer than 250 people and which have an annual turnover of less than50 million euros or a balance sheet total not exceeding 43 million euros.

of AMECO in Brazil is based on two fundamental assumptions, which are carried especially by the French economic press:

- **The current attractiveness of the Brazilian market**. Brazil has managed to improve drastically its economic situation since a few years and the country has succeeded in attracting capital from around the world. Many European investors wish to evade EU long-term slow growth and they rely on the huge potential of Brazil. The country has many business opportunities, including large-scale industrial projects (Les Echos, 2009).
- **The trend of deindustrialization in Europe**. The fewer industrial projects in Europe have pushed the company to focus on conquering new markets. Thus internationalization is not only an opportunity but rather a necessity for manufacturing companies (Les Echos, 2012).

In the wake of this week of interviews, AMECO was eager to start marketing Brazil. If there is interest, the company did not have the necessary internal resources to carry out research and to formulate a formal strategic plan to assess the relevance of such an investment. This is why AMECO has called for an outside advice to determine the potentiality of this market.

Although SMEs, such as AMECO, are becoming increasingly involved in international business, large multinational firms still dominate widely the international ground (Child & Rodrigues, 2007, p.32-34; Dunning, 2001, p.173-190). This is reflected in the international business literature, which had been heavily focused on MNEs (Wolff & Pett, 2000, p.44-45; Dunning, 2001, p.173-190). During the last decade, SMEs have gradually invested in abroad markets, which has given rise to increasing interest in the research field (Hagen, Palamara, Zucchella, Cerchiello, & De Giovanni, 2008, p.1-11). Oviatt and McDougall (1994, p.45-64) have stressed for instance that the gap in competitive advantage between large and small firms in international markets has shrinked. Besides, a firm's competitiveness is more determined by the availability of its resources or its unique assets, rather than the breadth or the quantity of its resources (Wolff & Pett, 2000, p.44-45).

As Porter revealed (1985), declining government-imposed barriers, innovation and technological diffusion have been prominent drivers of international competition. These changes have made technology-based industries become global (Karagozoglu & Lindell, 1998, p.45). Another aspect of the globalization trend is the insufficient volume generated by the domestic markets to support investments in R&D (Karagozoglu & Lindell, 1998, p.45). Thus, globalization has made it clear for SMEs to espouse international strategies (Karagozoglu & Lindell, 1998, p.45).

SMEs have been a focus for entrepreneurship researchers, who consider the entry into a new market as an entrepreneurial performance (Lu & Beamish, 2001, p.565). As a matter of fact, the internationalization of SMEs is expected to gain fervor in the academic field since the world economy is becoming more and more interspersed (Lu & Beamish, 2001, p.565).

1.3. THE COMPANY'S PRESENTATION

AMECO is a French company, which manufactures a line of equipment for handling bulk materials for the chemical and petro-chemical, mining, pulp and paper, power generation industries as well as ports and harbour facilities.

1.3.1. Ameco's history

AMECO, created in 1932 in Illfurth, near the Swiss and German borders, is considered as a SME[2]since it has 10 employees and a yearly turnover of around five million euros.

1.3.1.1. AMECO's specialization

AMECO's birth is closely linked to the development of potash mines in the region in the thirties, since it was the main equipment supplier of the mines at that time. This specialization acquired very early has made AMECO become the global benchmark in the fertilizer sector. Thus, even if AMECO equipment handle every kind of bulk materials, almost two thirds of its machines sold have been designed for the fertilizers, mainly Potash, Urea, NPK, KCL and Phosphate (Fig.1). In this business, references are a key point. The more a company has references in a particular field, the more the clients will trust the reliability of the equipment. Thus the importance of references fosters to be industry-focused and product-specialized.

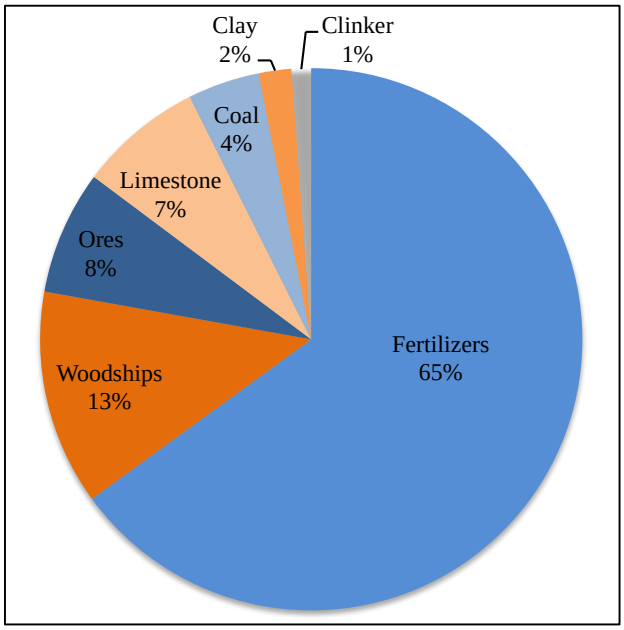


Fig.1[3]–Products transported by AMECO equipment (since 1932)

[2]INSEE's definition

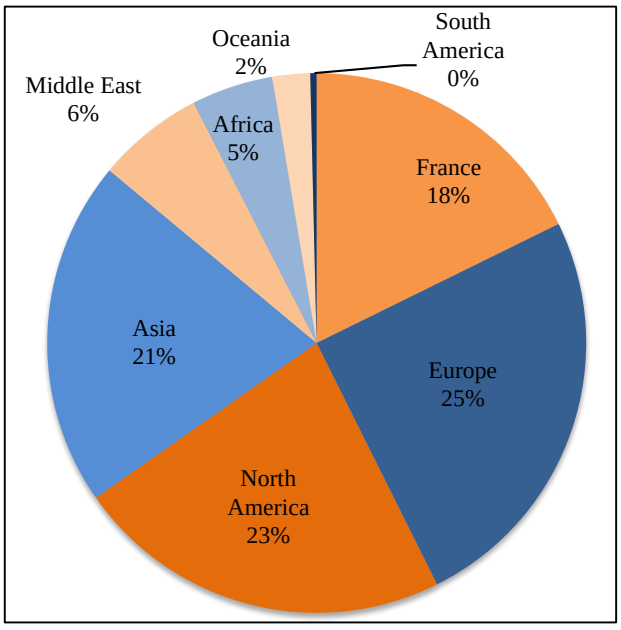
1.3.1.2. AMECO's business model

AMECO's market requires flexibility, since the backlog can vary substantially from one year to another. This is why AMECO stopped producing in Alsace in the eighties and begun to outsource in Czech Republic and Poland in order to reduce its workforce costs. Only engineers and technicians have remained in the French office to design the machines and take care of the after sales.
Normally, AMECO receives bids from major manufacturers worldwide and answer them. When an industrial project appears, technical buyers call specialized suppliers, such as AMECO. Because it is a niche market, all players know each other. Thus AMECO very often competes with the same rivals, which all are European or American.

1.3.1.3. A global presence

With more than two hundred sixty handling equipment around the world, AMECO is a complete globalized company. The French market represents 18% of its historic sales, and only 3% of its sales since the beginning of the nineties. For instance, AMECO has historically sold more machines in the USA than in France. There has been a presence in forty-three countries in all continents with the notable exception of Latin America (Fig.2).

A fair distribution can be observed between the European, North American and Asian markets.
The almost equal distribution between the European, the Asian and the North American markets has prompted AMECO to have a sales representative in the USA and in India to be closer to its ends consumers.



[3] http://www.ameco-tm.com/PDF/references_AMECO.pdf

Fig.2[4]–AMECO's geographical markets (since 1932)

1.3.2. Ameco's product line

AMEC's product line is mainly composed of four products: shiploaders, stackers, reclaimers and blending systems (Annex 1).The historical product of AMECO is the reclaimer, with two thirds of sales, and especially the portal reclaimer (41% of the machines sold historically) (Fig.3). It must be said that there is no link between the machine by itself and the industry in which AMECO works for. In other words, the distribution of machines sold by AMECO is more or less equal between the different markets.

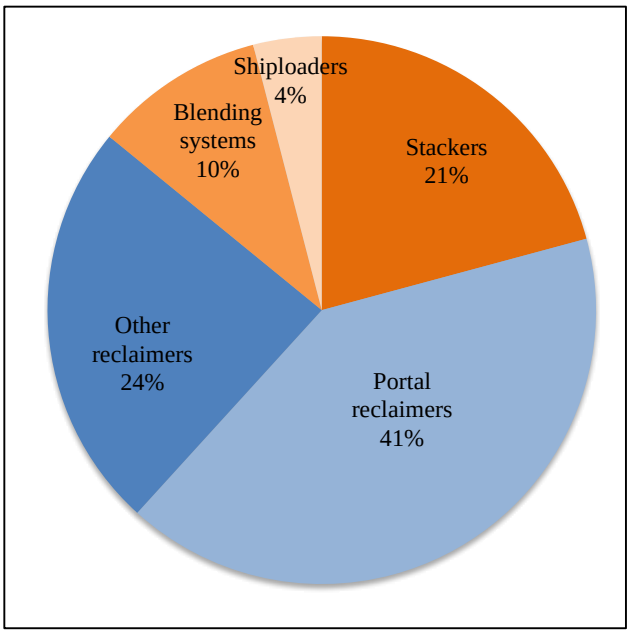


Fig.3[5]–Type of equipment sold byAMECO (since 1932)

1.3.2.1. Shiploaders

A shiploader is a machine for loading bulk materials into cargo ships. They are an essential component in ports and jetties where bulk materials are exported. It consists of three main elements: a boom, a belt conveyor and a mobile structure (Annex 2 & 3). Depending on the product being loaded, the kind of ships and the rate of loading, the proper tools vary. AMECO shiploaders are available for handling bulk materials and/or bags. They move along rails in order to reach the whole length of the ship and the boom is extendable so as to fill well the whole marine vessels.

1.3.2.2. Stackers

[4] http://www.ameco-tm.com/PDF/references_AMECO.pdf
[5] http://www.ameco-tm.com/PDF/references_AMECO.pdf

A stacker is a large machine whose main function is to convey and to pile bulk materials on to a stockpile. AMECO produces all kind of stackers including fixed and travelling stackers, luffing and siewing traveling stackers. Usually, stackers move horizontally along a rail between stockpiles and vertically by luffing its boom (Annex 4 & 5). However, some stackers can rotate the boom, which allows a single stacker to form two stockpiles, one on either side of the conveyor. AMECO stackers are specifically designed for client's needs taking into consideration the material to be stacked and available space.

1.3.2.3. Portal reclaimers

A reclaimer's function is to recover bulk materials from a stockpile. AMECO is a specialist of a particular kind of rcclaimer, called the portal reclaimer (Annex 6). This equipment is generally used in a production line as a bulk material buffer store. The input material comes on a rubber-belt conveyor and is discharged through the stacker travelling on rails alongside the store. The reclaiming is accomplished by one or several luffing scrapper arm(s) long enough to reach across the pile. The arms are made of a boom equipped with chains and blades for dragging the material to a belt conveyor.

1.3.2.4. Blending systems

A prehomogenising store is often necessary when the chemical composition of raw material varies greatly (e.g. fertilizers, ores, coal). A blending system consists of stacking a large number of layers on top of each other in the direction of the pile. This system can be longitudinal or circular (Annex 7).

1.3.3. Limited exposition of the company's information

Given AMECO's highly competitive environment and the publication of this thesis, it is impossible to disclose more information about the company. It could be used by the competitors and could endanger AMECO's business position. As a consequence, the following information will not be explicitly provided in this thesis:

- AMECO's turnover
- AMECO's profit
- AMECO's references
- AMECO's contacts

1.4. OBJECTIVES

The purpose of this thesis is to analyze the attractiveness of the target markets in Brazil in order to support AMECO's decision making on future investment.

The target markets considered in this analysis will be those defined as interesting for AMECO's CEO: the fertilizer industry and the power generation sector.

Thereby, the thesis' question is:

- **Are the Brazilian target markets attractive for AMECO to set up a subsidiary in the country?**

The specific objectives of the thesis are directly linked to the question:

1. Analyze, in the internationalization literature, the internationalization process of SMEs and their international strategies.
2. Based on the literature, build a framework which summarizes all the key success factors of SMEs when going internationally.
3. Quantify both markets and provide relevant information to AMECO's CEO about the target markets to give him a fair idea of their potentiality

In other words, the main objective is focused on AMECO's business to decide whether or not the company should invest in Brazil. From an empirical approach, the goal is to quantify both markets. Other objectives arise from the main goal. The literature review of internationalization process and the academic analysis of their international strategies will be valuable elements of decision support for AMECO's CEO. Above all, the framework of success factors will allow assessing better the enterprise and thus improving its strength and correcting its weaknesses.

1.5. ASSUMPTIONS

Academic literature, interviews given during my internship with managers of large Brazilian companies, as well as courses at FGV have allowed me to express two assumptions related to my objectives:

1. The launch of numerous projects in the coming years suggests the relevance to enter the Brazilian market. However, there will be variations between both target markets, presented hereafter by ascending interest:

1) Coal power generation. Brazil produces very little coal per year and coal represents a very small part of the energy mix. The interest for AMECO seems to be nonexistent.
2) Fertilizer industry: The current government aims to achieve self-sufficiency in fertilizers to ensure food safety and to prevent the rising cost of food production. Vale and Petrobras have been investing heavily in the production of fertilizers. The fertilizer industry is the flagship sector for AMECO.

2. The entry into the Brazilian market shall be done in several steps:

1) Send a sales agent on site. Business relations in Brazil are very personal and it takes time to build relationships. It is therefore imperative to have someone on hand to make contacts and make know AMECO.
2) Create a study department to provide after-sales service. It is important that the client company can be sure that, in case of problem on the machine, an AMECO's technician will be sent as soon as possible. Technical presence in the country is mandatory.
3) Find local suppliers and/or ally with another company to minimize import taxes, which a crucial point to be competitive in Brazil.

2. METHODOLOGY

The research plan has proceeded in two phases and approximately four months haven been required to do the research and to write the thesis down.

Phase I: Secondary data collection and analysis

Bibliographic research has been used to contextualize the research question and to understand better both markets. Websites, newspapers, magazines have been highly used in this section. Moreover, academic articles about the internationalization of SMEs and the investment in emerging countries have been read and analyzed. In order to access these sources, two databases present at Sciences Po have been used: JSTOR and Ebsco.

For this part, the time spent was around two months. This time includes reading all the academic literature about SMEs, but above all understanding both target markets in Brazil in order to be able to validate analysts' forecasts.

Phase II: Empirical research

In order to gain more insight to the issue by collecting secondary data, an empirical research has been conducted. The methodology of this part has completely evolved over time. Initially, it was planned to create a database with a list of potential clients, who could have been considered as the main industrial players of their industry. Target companies would have been referenced, thanks to research on the Internet and the contact of professional unions. Questionnaires, emails and telephone interviews would have been methods used in this sector. This approach would have been necessary, in case of not having any inputs in the industry.

However, over the last two years, AMECO's CEO has nurtured strong relationships with managers of the main industrial companies likely to be AMECO's future clients. For instance, all the information collected on Petrobras' projects, have been allowed thanks to the support of the international procurement coordinator of the company. During business meetings, questions have been asked by AMECO's CEO about for instance the number of industrial projects in the coming years. Stakeholders' answers have been detailed enough to avoid further research on this matter. Nonetheless, because business conversations are purely informal, they cannot be transcribed in this thesis. Moreover, for obvious reasons of confidentiality, the names of people involved cannot be disclosed.

At the beginning, phase II was planned to take two months to be accomplished, with the completion of the database, the numerous phoning and emailing. It was hoped that the time spent for this phase

would have been reduced, thanks to the company's network. Nonetheless, it has actually taken two months to recover and synthetize all the information.

3. LITERATURE REVIEW

The purpose of this section is first to analyze the literature about the internationalization process of SME and their different international strategies, then to investigate the key factors of success of SMEs when going internationally. Based on the literature, all success factors will be summarized in a conceptual framework designed specifically for the thesis.

3.1. THE INTERNATIONALIZATION PROCESS

There are a few major models about the process of internationalization of SMEs, which are described below (Armario, Ruiz, & Armario, 2008, p.485). The first model is developed by Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977), and it refers to the Uppsala model (Gankema, Snuif, & Zwart, 2000, p.15-27). The second model, theorized by Cavusgil (1980), is called the Innovation-Related model (Gankema et al., 2000, p.15-27). The third one, derived from the entrepreneurship literature, contends that a firm can be "born global" (Gankema et al., 2000, p.15-27).

3.1.1. The Uppsala internationalization model

Johanson and Vahlne (1977, p.36)'s U-model describes the internationalization process as "a gradual acquisition, integration and use of knowledge about foreign markets and operations and a successively increasing commitment to foreign markets". The model is based on the "establishment chain", which describes the step-by-step internationalization stages: no regular export activities, export thanks to agents, sales subsidiary and manufacturing in foreign markets (Moen & Servais, 2001, p.49-54). Thus the firm first builds its domestic activities and then progressively increases export involvement.

Johanson and Vahlne (1977) brought forward the so-called concept of "psychic distance" to explain why the process is gradual and why it implies a "learning process" (Gankema, et al., 2000, p.15-27). Because of lack of market knowledge (languages, cultures hindering the information), a firm needs to build experience about foreign markets and operations in order to identify opportunities or reduce risks (Moen & Servais, 2001, p.49-54).

Johanson and Vahlne (1990, p.18) corroborates that "the model has gained strong support in studies. The empirical research confirms that commitment and experience are important factors explaining international business behavior." However a growing number of criticisms have appeared in the last decade. For Gankema et al. (2000, p.15-27), the U-model does not take into account a lot of forces, which influence internationalization: the acquisition of information, foreign market selection and entry,

and marketing strategies.

3.1.2. The innovative-related internationalization model

Broadly accepted, the innovation-related internationalization model is an export model, which focuses on manufacturing SMEs (Bilkey & Tesar, 1977; Cavusgil, 1980). Unlike Johanson and Vahlne (1977), Bilkey and Tesar (1977) and Cavusgil (1980) consider the internationalisation process as more a stepwise development with various stages. They also focus on explanatory factors such as firm characteristics or management competencies.

However the innovation-related model is not monolithic and there are differences among its followers. For instance, Bilkey and Tesar (1977) create a six-stage model with slow export development to minimize risks:

1. No interest in exporting.
2. Willingness to answer unsolicited orders but no effort to explore the possibility of exporting.
3. Active to explore the feasibility of exporting.
4. Export on an experimental basis to some mentally close countries.
5. Experienced exporter to that country.
6. Exploration of feasibility to export to additional countries, which are psychologically further away.

A little different from the model above, Cavusgil's (1980) five-stage model shows that the firm is more dynamic during the initial stage seeking the implementation of the export process as soon as possible:

1. Domestic marketing: sales only into its national market.
2. Pre-export stage: search for information and evaluation of feasibility to export.
3. Experimental involvement: start to export to some psychologically close countries.
4. Active involvement: export to more new countries and increasing sales volume.
5. Commitment involvement: balanced allocation of resources between domestic and foreign markets.

Empirical studies (Gankema et al., 2000; Wolff& Pett, 2000; Sharma & Blomstermo, 2003) reveal a rising degree of international involvement by the SMEs over time. However, the variation of this increase is huge between firms and many researchers argue about the perfect time period between stages. Sharma and Blomstermo (2003, p.740) conclude that the longer a firm waits to initiate international activities, the more difficult it will be to grow internationally. The would-be capability to skip phases in the export-development process could build a competitive advantage *vis-a-vis* those

firms that follow a stepwise pathway. This is why some prefer flying from one of the first stages into one of the last stage (Wolff & Pett, 2000, p.34-35). However, Gankema et al. (2000, p.15-27) think that most SMEs need about two years to go from one stage to the next.

Other researchers lead to the conclusion that exporting is a mandatory first step in any process of internationalization. For Leonidou and Katsikeas (1996, 520-531), an export strategy is the primary foreign-market entry mode used by SMEs in their internationalization efforts. Because exporting allows SMEs to gain greater flexibility and to reduce resource commitment, it limits drastically the firm's risk exposure (Wolff & Pett, 2000, p.34-35).

From an empirical point of view, exporting is the most popular path used by firms, which engage with international markets, especially for SMEs (Morgan, Katsikeas, & Vorhies, 2011, p.271-272; Leonidou & Katsikeas, 2010, p.879-887; Hultman, Robson, & Katsikeas, 2009, p.1-2).

3.1.3. Born Global's Internationalization

Most criticisms against the internationalization models previously mentioned come from the new phenomenon called "born global" (Moen & Servais, 2001, p.49-54). As written by Knight and Cavusgil (1996, p.17), "the born global phenomenon presents an important new challenge to traditional internationalization theory."

Research started in the early 1990s, and a growing number of publications focused on this issue throughout the decade. Oviatt and McDougall (1994, p. 49) focus on newly created firms and define an international new venture as "a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources from and the sale of outputs in multiple countries." Other authors describe the same phenomenon using different terms including "instant internationals", "global start-ups" or "newly established high-involvement exporters" (Moen & Servais, 2001, p.49-54).

Madsen and Servais (1997) explain that these firms should be expected to grow in importance in the coming years. Since many industries are "globalized," the uncertainty described in the U-model and the innovation-related models is less important than before (Gankema et al., 2000, p.15-27). Improvements in information technology and production technology, improved niche marketing, the number of students with international experience, and the decline of trade barriers are all causal factors to the growing number of "born globals" (Knight & Cavusgil, 1996; Madsen & Servais, 1997).

3.1.4. The current literature

The current state of research suggests that, in mature industries in which environmental change is small, the U-model on internationalization is more suitable, whereas, in growing industries, the "born global" perspective provides a better understanding (Armario et al., 2008, p.485).

Moreover, some authors, such as Kamakura, Ramón-Jerónimo and Vecino Gravel (2012, p.237), suggest that the same firm may select different internationalization paths for different markets depending on many factors (cultural proximity, market knowledge). Moreover, some researchers advocate that a single theoretical framework is short to explain the growing internationalization among SMEs. Thus there is a need for a conjoint use of various core theories and modern frameworks (Armario et al., 2008).

3.2. FACTORS FOR INTERNATIONALIZATION

Success factors of SMEs for internationalization have been, through the years, one of the main trends in the research area. Here, we define success factors as the influential forces of SMEs' internationalization (Leonidou, 1998, p.44-49). Researchers have highlighted the factors that trigger the international expansion of SMEs. As a matter of fact, firms are usually motivated by more than one stimulus, which explains how complex the export decision is (Miesenbök, 1988, p.42-61).

3.2.1. Traditional frameworks

Many researchers have tried to build a framework in order to list all the factors that influence internationalization (Knight, 1999, p.12-30). Aaby and Slater (1989, p.7-26) propose a generic model for measuring internationalization performance in order to advise managers in their international decision-making. They focus on three internal factors:

1. Firm competence contains technology, market knowledge, planning, export policy, management control and communication.
2. Firm characteristics are divided into firm size, management commitment and management attitudes to export.
3. Internationalization strategy includes market selection, product line, pricing, promotion and distribution.

Zahra and George (2002) create a model so as to highlight the main forces of internationalization. Their model is divided into three main factors:

1. The organizational factor covers top management team characteristics, firm unique resource, firm specific variables such as age, scale and location, growth orientation, financial strength, product and service.
2. The environmental factor contains national culture, growth opportunities, profitability of industry, and economies of scale.
3. The strategic factor includes generic strategy such as low-cost or differentiation competitive strategy and functional strategy such as production or marketing strategy, entry strategy.

3.2.2. Conceptual framework

Mainly based on Aaby and Slater's (1989, p.7-26) and Zahra and George's (2002) studies, the theoretical model proposed for the thesis highlights four main categories. The model is represented by Figure 10. This is a gradual process in which each step should be followed over each other.

The first one concerns internal capabilities, namely firm characteristics and management competencies. A diagnosis of the company's strengths (i.e. core competencies) must be driven before going abroad. This step must always be analyzed first.

The second step refers to the external environment including the economic situation of the industry and external stakeholders. An external analysis is needed to understand the underlying trends and the roles of influential stakeholders.

This double examination (internal and external) leads to the formulation of a strategy tailored to the enterprise. This step is fundamental because the future success of the internationalization will depend largely on the choice of this strategy. The internationalization strategy consists of three strategies, first the generic one, then the choice of market and finally the choice of entry mode.

Last but not least, the fourth step is the adaptation that the firm must take into consideration when entering a new country. It deals with the operational activities, such as the management and the staff's actions.

The definition or the concept of the various key success factors of the proposed framework will be developed in the next section, beginning with the internal capabilities.

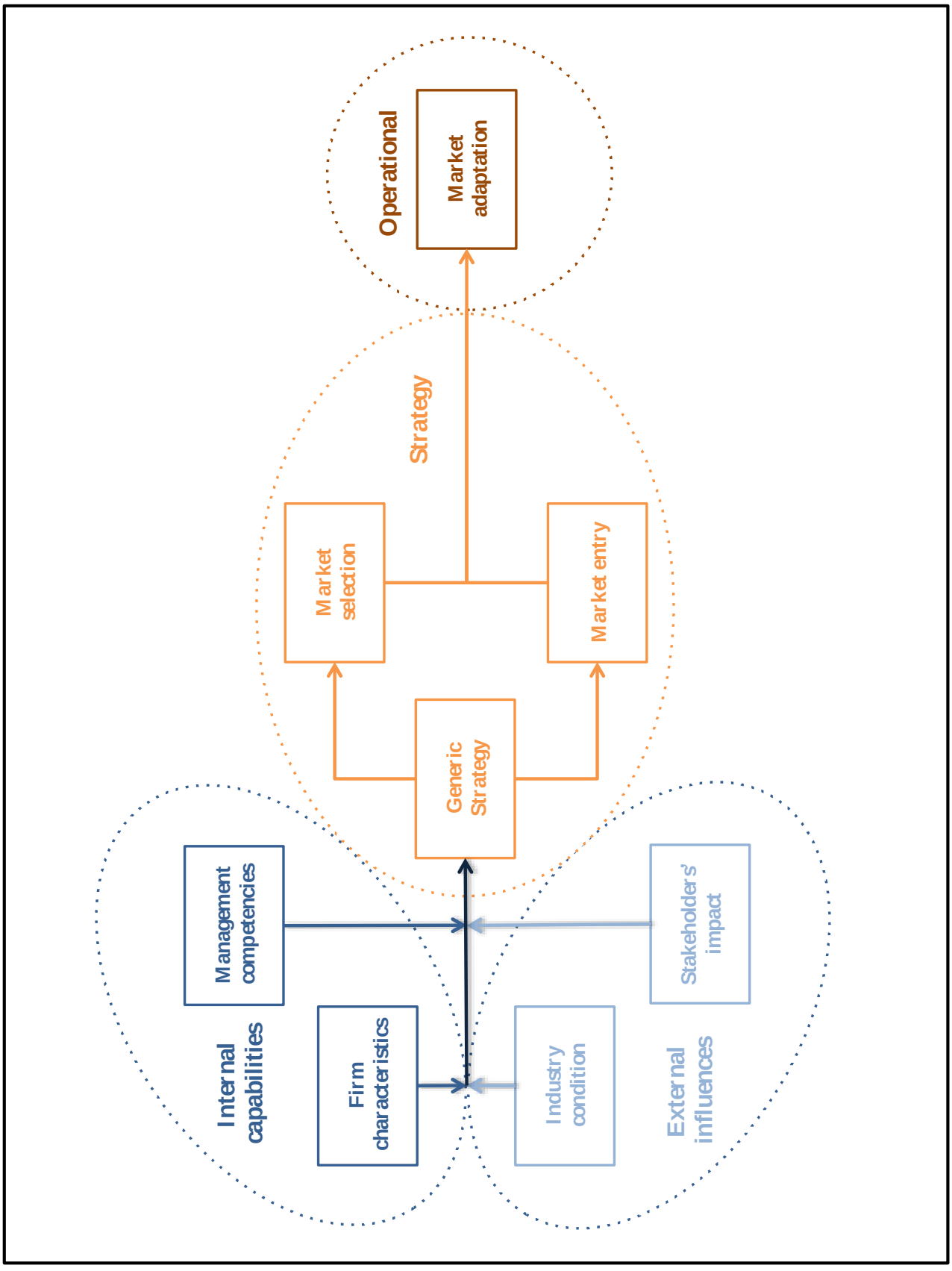


Fig.4 – Conceptual framework of the internationalization process of SMEs

3.3. INTERNAL CAPABILITIES

According to the proposed framework, the first essential step to succeed in international markets is to get beforehand core competencies. This implies first appropriate firm characteristics, then suitable management competencies.

3.3.1. Firm characteristics

Firm characteristics are considered as the basic factors to explain behaviors when a firm goes international (Aaby & Slater, 1989). In this thesis, four main factors are included: the size of the firm, its financial resources, its technological advantage, its product uniqueness and finally its idle operating capacity.

3.3.1.1. Size & financial capabilities

Prior research has shown that SMEs usually lack financial capabilities mandatory for successful internationalization. Size, which is linked to financial capabilities, has been analyzed as an independent item to explain export behavior and success (Bilkey & Tesar, 1977, p.93-98). According to Ogbuehi & Longfellow (1994, p. 38-39), the size of a firm seems to be the critical factor in forecasting export behavior. Compared with their larger counterparts, SMEs face disproportionate risks in their international expansion compared to larger firms (Child & Rodrigues, 2007, p.32-52). Because they face substantial resource constraints, they tend to be more risk averse to environmental uncertainty. Therefore they tend to seek safer growth strategies and most of them are reluctant to export abroad (Brouthers, Nakos, Hadjimarcou, & Brouthers, 2009, p.22-23). Thus financial resources affect significantly the speed and degree of international sales (Zahra & George, 2002).

However Calof (1993, p.67-68) discovers mixed results on the impact of size on the export performance of SMEs. If large firms with superior resources appear to go abroad with greater frequency than do SMEs, it does not prevent SMEs from internationalization. In fact size only confines the number of markets (Calof, 1993, p.67-68).

3.3.1.2. Technological advantage

Autio, Sapienza and Almeida's (2000, p.909-924) research divulges the positive and significant relationship between the industry's technological intensity and firm's international sales. Innovation culture is a key factor for Knight and Cavusgil (2004, p.124-141) because it enhances firm's particular knowledge and creates core capabilities, essential to the performance in international markets.

Furthermore, innovative activities back up the opening of new markets and the adaptation of firm's operations (Brouthers et al., 2009, p.22-23). In their international markets, SMEs depend on exploited pre-emptive technologies to sustain competitive advantage (Oviatt & McDougall, 1995, p.30-43). SMEs must use this particular know-how, and then they must continue the innovation on their existing products (Oviatt and McDougall, 1995, p.30-43).

3.3.1.3. Product uniqueness & idle operating capacity

Knight and Cavusgil (2004, p.124-141) believe that unique product development and product quality focus play an important role in positioning SMEs for international success. The resource-based view supports that unique firm-specific competencies offer a competitive advantage in foreign markets (Koh, 1989, p.198-203). SMEs with specialized knowledge of manufacturing processes increase their chances of success (Steiner & Solem, 1988, p.52). It includes, inter alia, the ownership of exclusive organizational competencies (Leonidou, 1998, p.44-49) and the exploitation of unique knowledge (Oviatt & McDougall 1994).

According to Kothari (1989, p.153-167), the two most powerful stimuli are the production of goods with unique qualities and the availability of idle operating capacity. Thus going abroad can potentially decrease costs thanks to economies of scale (Leonidou, 1998, p.44-49).

3.3.2. Management competencies

Most researchers (Miles & Snow, 1978; Oviatt & Mc Dougall, 1995, p.30-43; Leonidou, Katsikeas, & Piercy, 1998, p.74; Knight, 1999, p.12-30) agree to consider management to be central to explain the success of firms when internationalizing. Entrepreneurial skills, global vision, international market knowledge, the commitment towards internationalization and market-oriented attitudes are the success factors listed for this thesis.

3.3.2.1. Entrepreneurial skills

Many studies have emphasized how relevant it is to recruit risk-taking, innovative, and flexible managers in order to enhance the export side of their business (Leonidou et al., 1998, p.74). Because globalization gives rise to increasing market turbulence, the possession by management of an entrepreneurial orientation is essential.

Firms with a strong entrepreneurial culture are more likely to succeed in entering new markets and copying with complex environments (Miles & Snow, 1978). Entrepreneurial orientation is associated with overcoming difficulties, identifying opportunities, taking risks, adapting to changing environment, which make SMEs survive in though international competition (Knight, 1999, p.12-30).

The entrepreneur catalyzes the decision making process and engages his/her firm in proactive innovations, which affects the firm's innovation and later on its size (Knight, 1999, p.12-30). Otherwise, entrepreneur's communication and coordination faculties assure sustainable development. Finally, dealing with rare resources forces to improve SMEs' competitiveness (Miles & Snow, 1978; Knight, 1999, p.12-30).

3.3.2.2. Management's global vision

Global mindset is a driver of SMEs' internationalization, because it allows SMEs to search for market opportunities on an international scale (Miocevic & Crnjak-Karanovic, 2011, p.537-551). For Oviatt and McDougall (1995, p.30-43), global vision is one of the most important success factors because CEOs are not confined to a single country or culture.

These entrepreneurs handle the world market as their target market. As a matter of fact they are constantly looking for new opportunities (Oviatt & McDougall, 1995, p.30-43). Thus, managers should establish or maintain stimulation by nurturing an international spirit among employees in their organization (Leonidou, 1998, p.44-49).

3.3.2.3. Management's international market knowledge

Wolff & Pett (2000, p.45) conclude that internationally experienced management is a key factor in internationalization by SMEs. Entrepreneurs' international knowledge such as how to get and use international relationships provides particular advantages (Knight and Cavusgil, 2004, p.124-141). In fact, for many researchers, manager's international experience is perceived as a prerequisite to SMEs' internationalization (Oviatt & McDougall, 1995, p.30-43; Steiner & Solem, 1988, p.52). Cross-cultural knowledge and cross-border experience enhance communication skills, moderate conflicts, greatly reduce risks and increase efficacy (Ogunmokun & Ng, 2004, p.180-181). Managers with prior working experience in relevant industries, international marketing experience or even life experience abroad can help SMEs start their business more easily and successfully (Bell, McNaughton, Young, & Crick,2003, p.339-362).

Education background can be a source of international knowledge and somehow can affect entrepreneur's specific mind and way of thinking, which then influences the companies' strategies. Zucchella et al. (2007) point out that the practice of foreign language is the most fundamental precondition before going internationally.

3.3.2.4. Management commitment towards internationalization

Strong motivation and perseverance from management is a key factor for early internationalization (Ogunmokun& Ng, 2004, p.180-181; Brouthers et al., 2009, p.22-23).

Continuous management commitment to internationalization appears to be a relevant explanatory of success (Baird et al., 1994, p.57; Ogbuehi & Longfellow, 1994, p. 44-45). As the firm's commitment to internationalization rises up, managers are more inclined to seek information regarding foreign markets (Ogbuehi & Longfellow, 1994, p. 44-45). Thanks to their reading of foreign publications and their travelling abroad, they have a high perception of foreign markets (Ogunmokun& Ng, 2004, p.180-181) and barriers to going abroad (Brouthers et al., 2009, p.22-23).

3.3.2.5. Market-oriented (MO) attitudes

The strategy literature and the export performance research fields identify MO as a critical marketing capability and as a potential factor of export success (Cadogan, Kuivalainen, & Sundqvist, 2009, p.71-73; Pelham, 2000, p.48-64). MO enables to identify and meet the hidden needs of customers but also to forecast competitive challenges (Miocevic & Crnjak-Karanovic, 2011, p.538). Market-oriented behaviors enable organizational change; enhance market knowledge, allow developing new products that better suit customers' needs, improve the ability to analyze, understand, and respond to a range of contexts (Armario et al., 2008, p.486-489). In other words, companies must learn to learn (Armario et al., 2008, p.486-489). The most influential MO elements are great response speed, the tendency to screen regularly the environment and the exploitation of niche markets (Martin, Martin, & Minnillo, 2009, p.92-108; Armario et al., 2008, p.486-489).

In a few words, market-oriented firms use information about customers and competitors when planning their strategies. This is especially relevant when operating in international markets where market culture, business practices, channel structure, communications infrastructure, legal system are far different from the home market (Morgan et al., 2011, p.271-272).

3.4. EXTERNAL INFLUENCES

The international success also depends on external factors, such as the economic situation of the entire industry in which the company operates but also the roles played by stakeholders.

3.4.1. Industry condition

Going to a foreign market is a particularly relevant growth strategy for SMEs whose business scope has been geographically limited (Leonidou, 1998, p.44-49). Global competition and changing market demand in many industries force many to move into foreign markets (Martin et al., 2009, p.92-108).

3.4.1.1. Market demand condition & fierce domestic competition

Going internationally can become a reaction to adverse market conditions: domestic market shrinkage/saturation and compensation for declining domestic sales (Kothari, 1989). Even more, export development has been more a matter of survival than choice for many companies that face tough economic situations (Hultman et al., 2009, p.1-2). Market size and market growth potential may trigger the decision to go abroad (Madsen & Servais, 1997). This is especially the case for a country such as Brazil. Because of its apparent market potential, many managers in Europe are thinking about the Brazilian market. Most of them are aware of Brazil's vast size and of the country's improving economic situation since the reforms of the mid-1990s (Child & Rodrigues, 2007, p.32-52)

The saturation of the home market is often combined with the awareness that their existing markets could shrink or face growing competition (Child & Rodrigues, 2007, p.32-52). This is why another reason to choose to enter a foreign market is to diminish competitive pressures at home (Oviatt & McDougall 1994; Leonidou, 1998, p.44-49). In a sense, the more competition in the industry the more firms tend to internationalize (Martin et al., 2009, p.92-108).

3.4.1.2. Specificity of industries

The type of industry impacts firms' internationalization. Martin et al. (2009, p.92-108) reveal the existence of two trends which have pressed manufacturing SMEs of the western world. First, the greater dependence of SMEs to large enterprises on their supply of parts leads to accept lower prices and cost-reduction strategies. Second, the development of manufacturing production in developing nations has dramatically amplified competitive threats. As a result, manufacturing SMEs must develop more sustainable competitive advantages in order to stay in the race.

The industry life cycle stage also influences the degree of internationalization (Beal, 2000, p.27-29; Knight & Cavusgil, 2004, p.124-141). International new ventures occur more within growth industries

rather than mature or declining industries (Martin et al., 2009, p.92-108). The propensity to go outside is finally higher for firms, whose focus is on niche markets (Madsen & Servais, 1997).

3.4.2. Stakeholders' impact

The international success depends on the strength of networks, whether personal or business. Success can also be influenced by public funding, which can support the internationalization of SMEs.

3.4.2.1. Personal network

CEO's personal network is key factors because it enhances internationalization by providing assistance (Child & Rodrigues, 2007, p.32-52). Personal network is helpful, especially at the beginning of internationalization, to overcome initial lacks of resources and competencies. Personal contact can help for instance get financial support or find strategic partners in foreign markets (Oviatt & McDougall, 1995, p.30-43).

3.4.2.2. Business network

Going abroad can also be triggered by the firm's business network. First, it can come from the encouragement from major international customers or the following of smaller customers in their wish to go abroad (Bell et al., 2003, p.339-362). Second, it can be triggered by the solicitation of local agents (Leonidou, 1998, p.44-49). Third, chance meetings (business travels, common contacts) may lead to the awareness of opportunities in a foreign country (Leonidou, 1998, p.44-49).

Although unanticipated, such events generate an awareness of the opportunities for internationalization and, significantly, often laid the basis for a trust-based personal relationship to support that business. Thus, the establishment of mutual trust with intermediaries considerably facilitates the conduct of business. Trust is a central element in a country such as Brazil, where personal and human relationships are essential (Child & Rodrigues, 2007, p.32-52). The international business network lets acquire the tacit knowledge to reduce the uncertainty from the target market (Zucchella et al., 2007, p.268-280).

3.4.2.3. Public policies

Government policies are one influential factor, even if they do not trigger literally internationalization. Because, export activity is an important element for economic prosperity, public policy makers focus on export programs (Couto, Tiago, Vieira, and Silva, 2008, p.83). The goal of export promotion programs is to boost export performance by improving a firm's competences, resources, and strategies

as well as overall competitiveness. Governments provide export promotion plans, which consist mainly of tax rebates, loans and donations (Couto et al., 2008, p.83).

3.5. INTERNATIONALIZATION STRATEGY

Without doubt, internationalization strategy is the most impacting success factor when going internationally (Leonidou, 1998, p.44-49; Knight & Cavusgil, 2004, p.124-141). Compared to MNEs, many SMEs do not adopt a strategic orientation for their international activities (Oviatt & McDougall, 1994, p.45-64). A greater entrepreneurial inclination, leading to increased sensitivity to environmental change, among such small firms, may explain success (Miles & Snow, 1978; Leonidou et al., 1998, p.74). However, in complex international operations, this approach is not sustainable. Actually, the success of SMEs under globalization depends widely on the formulation and implementation of a strategy (Miles & Snow, 1978; Porter, 1980; Knight, 2000, p.12-30). Many authors have tried to create a framework to identify possible strategies so as to help SMEs to choose (Leonidou, 1998, p.44-49).

A careful plan of research must be settled down because successful market expansions are strongly linked to prior international market research. Researchers have underlined the importance of the link between planned market research and export market performance (Beal, 2000, p.27-29; Morgan et al., 2011, p.271-272). According to Ogunmokun& Ng (2004, p.180-181), managers must think carefully about international possibilities and then plan step by step their future actions. This is the reason why environmental scanning is commonly considered as the first step in the process of formulating a strategy. Scanning allows a firm to learn about opportunities and threats, thus enabling the firm to be competitive (Knight & Cavusgil, 2004, p.124-141).

About information management, SMEs have two options, either buy foreign market information from external sources or obtain their own (Toften & Olsen, 2004, p.121). On one hand, given the tremendous amount of information and the lack of time, owners/managers of SMEs can use the expertise of a marketing research firm (Toften & Olsen, 2004, p.121). However, exporters should spend time in investigating the reputation of these suppliers. On the other hand, it might be better to seek information in-house. Attention must be paid both to the efficiency of the instruments used to produce relevant information and to the firm's ability to absorb and interpret such information (Souchon, Diamantopoulos, Holzmiller, Axinn, Sinkula, Simmet, & Durden, 2003, p.120-121). In case of intense competition, it is advised to employ the expertise of a marketing research agency (Souchon et al., 2003, p.120-121). Otherwise, SMEs can call at any time outside consultants to help them develop their strategy. When in doubt, or in case of lack of internal resources, they should not hesitate to call for outside help (Ogunmokun & Ng, 2004, p.180-181).

Thus the selection of a market expansion strategy is decisive for a firm to become involved in foreign markets. Expansion strategies deal with choosing the most suitable generic strategy, selecting the most

promising markets, choosing the most appropriate entry mode and finally adapting products for the target foreign market (Katsikea, Theodosiou, Morgan, & Papavassiliou, 2005, p.59).

3.5.1. Generic strategy

The question of which strategies to choose must be addressed firstly for national markets (Baird, Lyles, & Orris, 1994, p.48-49). The SME must ask whether the strategy implemented in its historic market should be challenged or be unchanged in foreign markets.

Davig (1986) has used Miles and Snow's (1978) four major strategy types to study small businesses and proposes a framework with four potential strategies for SMEs:

1. Defender strategy. The firm maintains a niche market in a moderately stable product area and its goal is not to be at the forefront of the industry. It focuses on a reduced range of products than its competitors. The company compensates this disadvantage by offering higher quality products and lower prices.
2. Prospector Strategy. The enterprise holds a fairly broad portfolio of products, which may change occasionally. It puts all its efforts to offer new products even if it is not proved to be highly profitable.
3. Analyzer Strategy. These firms have got a stable and slightly limited line of products, while at the same time they track the more promising developments in the industry.
4. Reactor Strategy. This strategy is more inconsistent than the other three types - a sort of "non-strategy." These firms do not take risks on new products/services introductions unless forced by competitive pressures in order to maintain profitability.

Galbraith, Rodriguez, & DeNoble (2008) take up the ideas developed by Porter (1980, 1985) to propose four strategies for manufacturing SMEs:

1. R&D leadership strategy. The company aims at investing massively on R&D in order to maintain its position of leader or to be first-mover to gain sustainable advantage.
2. High value strategy. The firm emphasizes its investments in developing specialized, premium products in order to create a perception of uniqueness. In technology-intensive industries, differentiators tend also to be technology leaders.
3. R&D follower strategy. Their strategies involve low-cost manufacturing of proven products and technologies.
4. Low-cost strategy. They focus on their cost structure, which lets them manufacture products at the lowest possible cost. For these firms, the R&D department is typically less emphasized.

3.5.1.1. Defender vs. prospector strategies

Authors differ on the best strategy for SMEs when going abroad. Some authors believe that growth minded SMEs should choose a niche strategy and focus on where they have competitive advantages (Beal, 2000, p.27-29). Then, SMEs should have a limited range of products and should aim to improve

performance in their current products (i.e. Davig's defender strategy, 1986). On the contrary, other researchers suggest that a SME should hold a broad portfolio of products in order to reduce the risk of failure of a product (i.e. Davig's prospector strategy).

3.5.1.2. R&D leadership/high value vs. R&D follower/low-cost strategies

Some authors, such as Namiki (1988, p.36-37), suggest that all the strategies aim at differentiating firms from their competitors through marketing, innovation, or product quality (Galbraith et al.'s R&D leadership and high value strategies, 2008). On the other side, Zahra and George (2002) think SMEs' competitive strategies such as low-cost strategy positively relate with internationalization because these strategies help firms to entry and occupy foreign market faster (Galbraith et al.'s R&D follower and low-cost strategies, 2008).

3.5.1.3. Concentration vs. spreading strategies

Several surveys (Brouthers et al., 2009, p.22-23) suggest the adoption of a market concentration strategy, since SMEs tend not to possess the managerial and financial resources to expand successfully in several foreign markets. By focusing on a small number of target markets, SMEs can attain a larger market share, which improves their long-term profitability. Another group (Katsikea et al., 2005, p.59) advocates a market spreading strategy. By exploiting a large number of dispersed markets, exporting firms can diminish foreign market-related risks and enable higher levels of profitability.
Between these extreme strategies, some authors (Baird et al., 1994, p.48-49) have supported a contingency approach. The main idea is that the relevance of a particular market expansion strategy depends on various situational factors, such as product, life cycle, market, and firm characteristics. In other words, a SME must be able to adapt to their particular specificities.

3.5.2. Market selection strategy

Market selection is an important element of the firm's internationalization process because of the impossibility of entry into all the nation states. Besides, not all countries have the same potential. Many SMEs have niche markets and often mature products. Due to their fast industrialization, emerging giants (India, China and Brazil) increase their demand for technological products from the industrialized world (Welsh & Alon, 2001). However, these markets undergo higher political risk and macroeconomic fluctuations (Welsh & Alon, 2001). Thus, SMEs need to watchfully choose where to grow internationally with their limited resources (Alon, 2004, p.25-33). To minimize the risks associated with these countries, Alon (2004, p.25-33) proposes a six-step model that can be used by Small to Medium Technology Firms (SMTFs) to select international target markets.

3.5.2.1. Examination of the product exports

The Department of Commerce (Chambers of Commerce in France) is useful to collect relevant information. Government figures are a good indication of the potential of the target market because they are based on commodity numbers aggregated directly from export documentation. It is also a resource thanks to its programs promoting international trade.

3.5.2.2. Investigation of web site hits

A company's website can serve to encourage foreign operations. Thereafter, the company can recoup information about target countries and select the country, which suits the most with the company's products.

3.5.2.3. Analysis of customers and competitors

To measure the potential of the company's customers, the export and import markets of the firm's products can be observed. The internationalization of the competitors should also be checked. Their presence in other markets can expose their relevance.

3.5.2.4. Categorize markets according to their potential

In order to select the most suitable market, the company can rank each potential market. The classification can be made thanks to a few factors, which can be weighted.

3.5.2.5. Rank market due to their ease of entry

Because SMEs lack financial and managerial resources, foreign markets cannot be considered as equivalent. Each country should therefore be ranked in the order of ease-of entry.

3.5.2.6. Evaluating and prioritizing the most promising markets

At this stage, steps 4 and 5 should be assessed together. The company may appeal to diversify geographically and go into unexplored territories. Risk acceptance and desired expansion will order this decision. Since it is a SME, with modest resources and limited international experience, it is suggested that it first focuses on countries that would be relatively easy to enter. Specific business plans are required for each of the ten markets firstly to study market opportunities and then to identify prospective manufacturer's representatives.

3.5.3. Market entry strategy

Among the most critical topics in international strategy is the selection of an appropriate entry mode (Ekeledo & Sivakumar, 1999, p. 274-292). Lu and Beamish (2001, p.565-586) recently found that entry mode usage and SME performance are significantly related, indicating the critical importance of making the right mode choice. Many SMTFs have a tailored approach requiring a direct relationship to the customer so as to configure them to the customer's needs and provide after-sales service (Child & Rodrigues, 2007, p.45-51). In this configuration, four main mechanisms of expansion into foreign markets can be distinguished for SMTFs.

3.5.3.1. Export

Exporting is a traditional and well-established technique of reaching foreign markets. It does not involve investment in the foreign market since the goods are not produced in the target country.

A firm can export thanks to an agent, who conducts the marketing distribution functions, such as promotion, pricing, delivery, and after sale service at the lowest possible cost (Bello & Lohtia, 1995, p.83-85). The company reduces its financial risks by avoiding direct investment, but at the same time increases its managerial risk in the sense that they do not have direct control of relations with their customers. This was a prime reason why this kind of SMEs give so much importance to trust in their agents and the personal relationship that backs up such trust (Child & Rodrigues, 2007, p.45-51).By using agents, SMTFs are able to export technically complex products. Transaction costs are minimized because agent users keep their knowledge from initial trainings and they are completely associated with other employees. Moreover, agents are required when human specificity is high because it reflects complex buying motives on the part of foreign customers (Bello & Lohtia, 1995, p.83-85). Finally the company must develop a specific method for selecting a fitting agent. Then, the company must optimize its agency relationship with its agent by systematically controlling its performance (Alon, 2004, p.25-33).

3.5.3.2. Strategic alliance

SMEs can act independently (competitive strategies) or by act cooperatively with other firms (cooperative strategies). Alliances are an important option for small firms moving abroad. Because of the firms' limited resources and increasingly complex technology solutions, collaboration is sought among players with complementary know-how (Lee, Kelley, Lee, & Lee, 2012, p.2-15; Moen & Servais, 2001, p.49-54). Thus cooperative arrangements, including R&D alliances, are a key strategy to overcome resource limitations and a good mode of commercialization (Lee et al., 2012, p.2-15; Lu & Beamish, 2001, p.565). Owners/managers of technology-based SMEs should be more conscious of the importance of strategic alliances to compete effectively (Karagozoglu & Lindell, 1998, p.56).

3.5.3.3. Joint venture

Another cooperative strategy is the joint venture (JV), which allows two or more partners to develop a new entity by contributing equity. Complementarity know-how of the parties and their mutual agreements are essential to business success (Karagozoglu & Lindell, 1998, p.56). A SME may prefer to invest through a JV in order to gain access to local knowledge and contacts. Thus the local partner in a JV can be the bridge that allows the foreign investor to decrease the cultural gap between both countries. The foreign company may rely on the local partner and let him control and coordinate some tasks taking advantage of its familiarity with the host country's culture (Brouthers & Nakos, 2004). On the other hand, cooperating with a local partner leads to higher transaction costs, which derive from the differences related to values, norms and behavior rules (Brouthers & Nakos, 2004).

3.5.3.4. Foreign direct investment (FDI)

FDI is potentially a more competitive way than exporting for operating in international markets (Lu & Beamish, 2001, p.582). SMEs should investigate opportunities to make FDIs so as to take advantage from the latent value linked to such investments (Lu & Beamish, 2001, p.582). However, initial investments may involve a high cost for a newly internationalizing firm. There are two main primary modes of investment: Greenfield, and acquisition.

Greenfield is the most expensive way, since it necessitates the employment of staff in the foreign country and the establishment of an office there. These requests can increase the financial resources by adding direct costs of additional employment and by bringing the firm under bureaucratic regulations (Child & Rodrigues, 2007, p.45-51).

Acquisition is less time consuming and it is a less risky entre mode compared to Greenfield. Moreover, it enhances an immediate grab of market share and allows reducing competition by removing a rival (Lu & Beamish, 2001, p.582). However, an acquisition can lead to important drawbacks, such as cultural clash between the two entities (Child & Rodrigues, 2007, p.45-51).

3.5.3.5. Conclusion

Before taking the right decision, a business plan must be carefully conducted. On the one hand, according to empirical research (Child & Rodrigues, 2007, p.45-51), SMEs tend to choose low-resource market entry modes at the beginning of their internationalization. Thereafter, if the market turns out to be attractive, the firm will focus on equity investments (Child & Rodrigues, 2007, p.45-51). On the other hand, most firms cannot export their products into the Brazilian market because of logistical reasons and high import duties. This is why many companies are looking for acquiring a local company. Nevertheless, such an investment can be problematic for a firm, which does not have

any prior experience of acquisition and any knowledge about Brazil (Child & Rodrigues, 2007, p.45-51).

3.6. MARKET ADAPTATION

After choosing the market, the SMEs must be vigilant to adapt well to the new country. The cultural distance between the home and the host countries is the main source of problems (Hofstede, 1980, 1994, 2001). Researchers have used Hofstede's model (1980) to select three main characteristics for Brazilian cultural traits: power concentration, personal relationship and flexibility (Barros & Prates, 1996).These traits must be taken into account to avoid mistakes when doing business in Brazil.

3.6.1. Power concentration & personal relationship

One of the most important features of the Brazilian culture is hierarchy, whose roots come from the colonial times. In Hofstede's studies (1994, 2001), the power distance index is the one that most clearly distinguishes Brazilian culture. Another fundamental attribute of the Brazilian culture is the importance of personal relations. Brazil is recognized for the friendliness of relations, hospitality and the attachment of the personal dimension in professional relations (Tanure & Gonzalez Duarte, 2005, p.2204-2207). This is due to the role of the family. Families were centralized on the father figure and regulated by blood and affective relationships (Barros & Prates, 1996).

Paternalism appears directly from the combination of power concentration and human proximity (López-Duarte & Vidal-Suárez, 2010, p. 575-588). The counterbalance to paternalism is the fear of erring, which can be negative for the performance of the organization. In addition, in Brazil, the group members value the needs of a leader. This process generates the feeling of belonging, which is a strong cohesion mechanism. The leader obtains the loyalty of his group members, who in return, ask for security (Tanure & Gonzalez Duarte, 2005, p.2204-2207).

3.6.2. Flexibility

Another typical cultural trait of the Brazilian culture is flexibility. There is an 'intermediary path' between what is and what is not allowed (López-Duarte & Vidal-Suárez, 2010, p. 575-588). This search for an intermediary path represents the flexibility and the capacity for adaptation of the Brazilian people. Informality may be expressed by several ways: communication, language, way of dressing, use of time. It is also linked to cordiality and hospitality into interpersonal relationships (Barros & Prates, 1996).

Flexibility is perceived as a double-faced category, reflecting adaptability and creativity (Tanure & Gonzalez Duarte, 2005, p.2204-2207). Adaptability refers to the firm's agility to adjust itself to the

different government plans that have been so common in the recent past. This past changing environment has led to a strong adaptive capability in the present time. Creativity is due to one of the exceptional traits of the Brazilian culture: affectivity. Brazilians are inviting and are not afraid of physical touch. Their expressions are strong and their talk is fluent and dramatic (Tanure & Gonzalez Duarte, 2005, p.2204-2207).

The Brazilian cultural features reinforce the need to conduct business on a basis of personal liking and trust rather than relying heavily on formal and contractual agreements. As a consequence, it is hard to overcome the challenge of trust in Brazil without intermediation through local people (Child & Rodrigues, 2007, p.32-52). The quality of a local employee or an agent, who can link the firm into wider Brazilian networks, and the quality of the relationship forged with them, emerge as crucial success factors. It is fundamental for a SMTF to network with the relevant personnel within Brazilian MNEs to become an approved supplier either directly to the company or indirectly as a provider to one of the Brazilian engineering companies that serve them (Child & Rodrigues, 2007, p.32-52).

4. MARKET ANALYSIS

The core issue for this part will be to assess the relevance to of the two following target markets in Brazil: the fertilizer industry and the power generation industry. Before going into the details of market analysis, critical success factors for both markets should be examined.

4.1. CRITICAL SUCCESS FACTORS

There are four key success factors in the industry of bulk material equipment, which have to be taken into account and are essential to the success of the company[6].

4.1.1. Costs

AMECO's market is a mature market with high barriers to entry (technical capacity and business references). Due to the maturity of the market, the industry is highly concentrated with only a few remaining players. Thus the competition between players focuses on the selling price[7].

4.1.2. Delivery

Delivery is extremely important in this business because of the fear of paying penalties for late arrival. Because of the importance of the equipment, deadlines on the machine should fit perfectly the overall planning of the industrial site. Thus relations with suppliers and the fulfilment of the commitments are essential to the success of the operation[8].

4.1.3. Quality

Since these machines are key pieces of industrial sites, the assurance of having a reliable product is fundamental. This is why, in this business, references are a key point. The more a company has references in a particular field, the more the clients will trust the reliability of the equipment[9].

4.1.4. Customer Relationship Management

The client needs to be guaranteed in case the machine fails. Whether the machine stops working; the entire production chain stops and paralyzes the whole plant. Many require the presence of technicians

[6]AMECO's analysis and interviews
[7]AMECO's analysis and interviews
[8]AMECO's analysis and interviews
[9]AMECO's analysis and interviews

or at least a representative in the country to assist them in case of troubles[10].

4.2. MARKET POSITIONING

The company is positioned differently with respect to its competitors in the few bulk material equipment markets[11]. The following table (Table 1) relates the six main bulk materials with the three differentiation criteria, which allow gain a competitive advantage in this business[12]. The green arrow reflects a good match for AMECO, the orange symbol reveals an average positioning and the red cross tells a bad presence.

	Fertilizer	Coal	Woodchips	Clinker	Ores	Clay
References	✓	✓	~	~	~	~
Technologic advancement	✓	~	×	×	×	×
Competitive Rivalry	✓	~	~	×	×	×
Results	✓	~	~	×	×	×

Table 1 - AMECO's positioning in regards of the different bulk materials

Taking into account the criteria differentiating core competencies, only two sub-segments are seen to be promising for AMECO, the fertilizer industry and the power generation sector.

- **Clinker, ores and clay industries**. For these three markets, AMECO does not have enough references in the past. Above all, the company is lagging behind technologically; because the required machinery is much larger. Finally, competition is fierce and prices are pushed down[13].
- **Woodchip (Pulp & Paper).** AMECO has been present in the past on this market, but unfortunately a competitor has changed lately its technology and therefore has won all the tenders. Its reputation in the global market is so large that it seems impossible to cope[14].
- **Coal (power generation).** AMECO has recently sold a few machines on behalf of clients in the energy sector. However, if the entire industry should not be neglected, large projects will be excluded, because these projects require specific machines[15].
- **Fertilizer industry.** The fertilizer sector remains the single market, in which AMECO has a real comparative advantage in comparison to its competitors. In this niche market, AMECO has the

[10] AMECO's analysis and interviews
[11] AMECO's analysis and interviews
[12] AMECO's analysis and interviews
[13] AMECO's analysis and interviews
[14] AMECO's analysis and interviews
[15] AMECO's analysis and interviews

highest number of references in the world, and it is at the forefront of technology. In addition, few companies are positioning themselves in the market, given its relatively small size[16].

[16]AMECO's analysis and interviews

4.3. MARKET SIZE

The market is affected by three underlying drivers, which follow one after the other. Each driver must be analyzed separately to determine the potential market size for AMECO (Fig.5)[17].

1. **Number of large-scale industrial projects** in the power generation and the fertilizer sector
2. **Type of equipment for each project**, which includes to analyze bothequipment requirements and equipment selling price

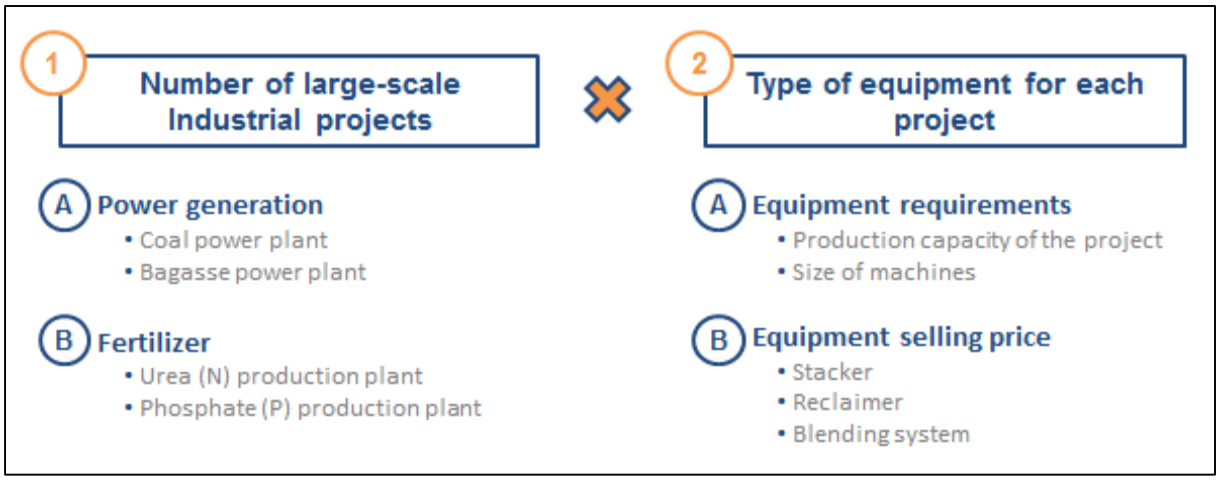


Fig.5– Details of the two underlying factors

The first task will be to count the number of potential industrial projects. This process will be done in two stages:

- **An analytical approach,** which will consider the trends in consumption and the trends in production to determine the long-term potential of these markets.
- **An operational approach,** which identifies specific projects to come, in order to see if AMECO could position itself in the short-term and win tenders.

[17]AMECO's analysis and interviews

4.4. FERTILIZER INDUSTRY

4.4.1. General trends

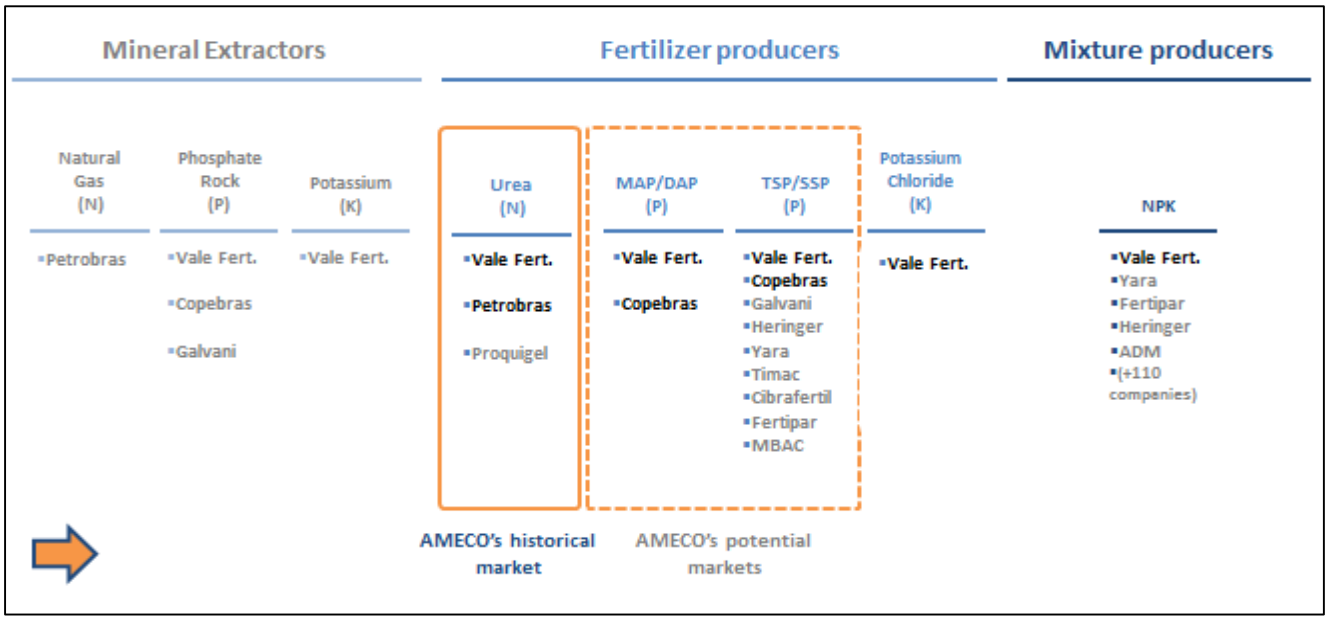
The fertilizer industry in Brazil will sustain major upheavals in the coming years, with a very strong increase in production[18].

4.4.1.1. The Brazilian fertilizer industry

There are three main nonorganic fertilizers families; AMECO is only positioned on two of them the nitrogen fertilizers (N) and the phosphate fertilizers (P)[19]:

- **Nitrogen fertilizer (N)**: this fertilizer's family is derived from natural gas and its main compound is urea. They are the most commonly used fertilizers in the world.
- **Phosphate fertilizers (P):** Phosphate fertilizer is manufactured from rock phosphate, which is mined and processed.
- **Potash fertilizers (K):** this family is the third used fertilizer worldly and the product is extracted from ores.

Moreover, the nitrogen and phosphate fertilizers production chains are controlled by a few players, namely Petrobras, Vale Fert and Copebras. These companies are potential AMECO's customers and therefore the analysis will focus on their future investments (Fig.6).



[18]AMECO's analysis and interviews
[19]AMECO's analysis and interviews

Fig.6 - Positioning of companies in the value chain of fertilizers in Brazil[20]

4.4.1.2. Trends in consumption

Brazil is one of the world key players in the global fertilizer market, especially in terms of consumption, as shown in the following table (Fig.7) (ANDA, 2011).

	NPK	%	Nitrogen	%	Phosphate	%	Potash	%
1	China	30	China	33	China	29	China	19
2	India	16	India	16	India	20	USA	16
3	USA	12	USA	11	USA	10	**Brazil**	**14**
4	**Brazil**	**6**	Indonesia	3	**Brazil**	**9**	India	14
5	Indonesia	3	Pakistan	3	Pakistan	2	Indonesia	4
6	Pakistan	2	**Brazil**	**3**	Australia	2	Malaysia	4

Fig.7 - World Ranking Fertilizer Consumption in 2010 (ANDA, 2011)

The fertilizer consumption in Brazil has been increasing over the years, regardless of the type of fertilizers (N, P or K) at about 5% per year over the last decade (Fig.8) (ANDA, 2011).

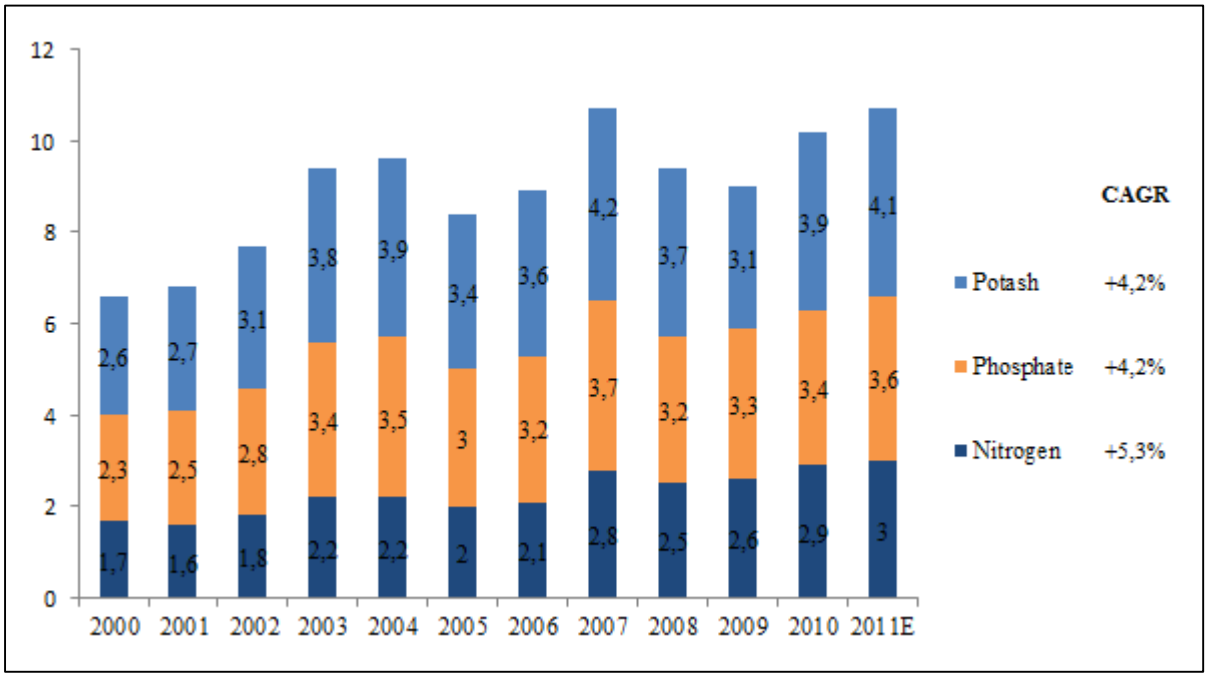


Fig.8 - Fertilizer consumption in Brazil between 2000 and 2011 (10^6T) (ANDA, 2011).

Brazil has a strong competitive advantage in agribusiness in the world and exports its goods both to the developed world and the developing world (ANDA, 2011). Furthermore there is a will in the country to use this leverage to create wealth and promote growth. This is the reason why the use of

[20] HERINGER's analysis : physical brochure

fertilizers is more significant. As shown in the graph below, the rapid growth of Brazilian grain production was due to increased fertilizer use. In fact, the two phenomena are highly correlated, which is not the case for the other underlying driver, the arable land (Fig.9) (ANDA, 2011).

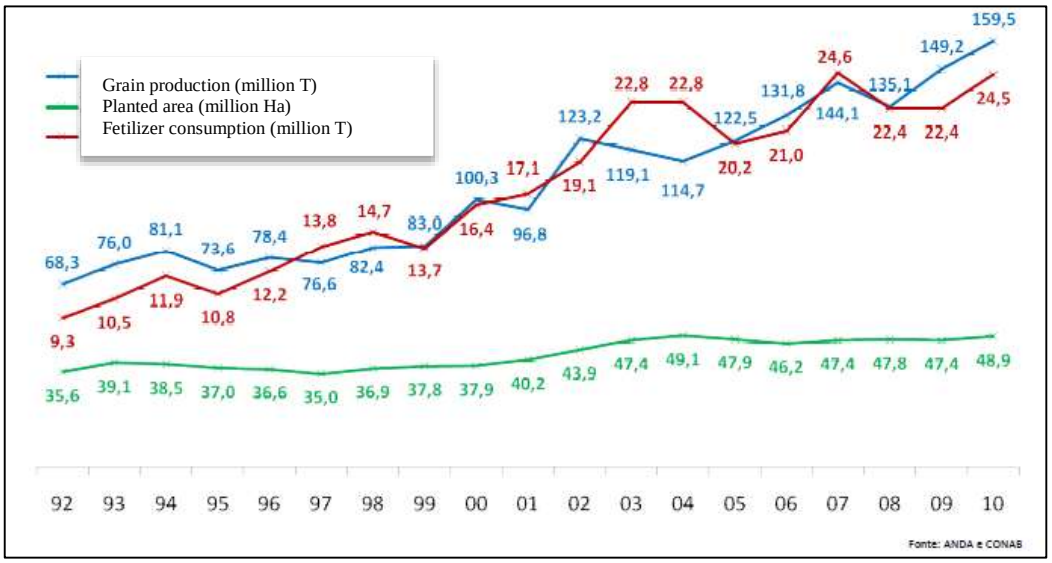


Fig.9 - Planted area, grain production and fertilizer consumption in Brazil (1992- 2010) (ANDA, 2011)

4.4.1.3. Trends in production an imports

Brazil is highly dependent on imports, as it can be observed in the following table (ANDA, 2011).

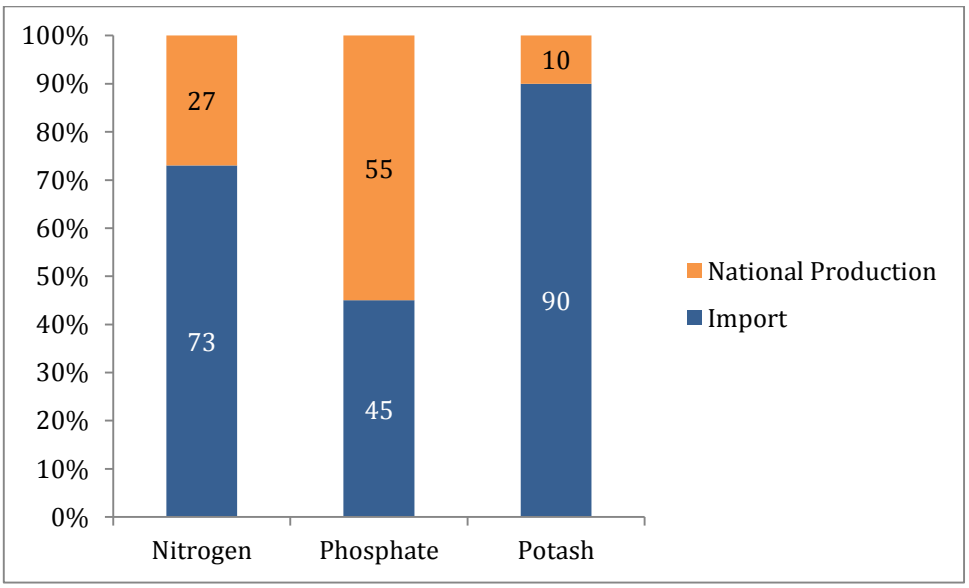


Fig.10 - Domestic production and imports in the supply of fertilizers (2006 - 2010) (ANDA, 2011)

This is especially true for nitrogen fertilizer and phosphate fertilizer, since respectively 73% and 90% of consumed products are imported (Fig.10).

Based on the observation that Brazil has an enormous need for these resources and since primary resources (natural gas and phosphate minerals) have been discovered for two fertilizer families (Nitrogen and Phosphate) the production of fertilizers will take off in the coming years (Fig.12) (ANDA, 2011).

	2012 (m tons)			2017 (m tons)		
	Production	Consumption	Import	Production	Consumption	Import
Nitrogen (N)	880	3543	75,2 %	2001	4272	53,2 %
Phosphate (P)	2220	4372	49,2 %	4052	5237	22,6 %
Potash (K)	325	4284	92,4 %	3300	5223	36,8 %
Total	**3425**	**12198**	71,9 %	**9353**	**14732**	26,5 %

x3

Fig.11 – Estimated production, consumption and imports of fertilizers between 2012 and 2017

In five years, the goal is to reduce drastically the import of fertilizers and partly compensate the increase in consumption. This boom in production will change the landscape of the fertilizer industry in the country and will lead to the building of plants (ANDA, 2012).

According to the three main actors identified above (Petrobras, Vale Fert and Coprebras), the analysis will focus on the various projects that they will implement in the country in the following years (ANDA, 2012).

4.4.2. Petrobras' investments

Petrobras will invest in three future fertilizer production plants in the next 4 years. With these three new plants, Petrobras will double its production of fertilizers in the country (ANDA, 2012).

- **UFN III**: (Unidade de Fertilizantes Nitrogenados III)
  - Start-up: September 2014
  - Investments:US$ 2,5 billion

- Production capacity:
  - Urea: 1210 Kty
  - Ammonia: 761 Kty

- **UFN IV**: (Unidade de Fertilizantes Nitrogenados IV)
  - Start-up: ~2015 - 2016
  - Investments:US$ 3,1 billion
  - Production capacity:
    - Urea: 763 Kty
    - Ammonia: 430 Kty
    - Methanol: 790 Kty
    - Acid:225 Kty

- **UFN V**: (Unidade de Fertilizantes Nitrogenados V)
  - Start-up: ~2015 - 2016
  - Investments: US$ 1,3 billion
  - Production capacity
    - Ammonia: 519 Kty
    - CO2: 170 Kty

4.4.3. Vale's investments

Vale Fert has also planned to invest in fertilizer production. However, unlike Petrobras, Vale has preferred to invest in fertilizers by acquiring existing businesses. The company was actually born after the acquisition of three fertilizer producers (Fig.12) (ANDA, 2012).

Fig.12 – Localisation of Vale Fert plants in Brazil in 2012(current in blue, project in orange)

Vale Fert is thus reorganizing its entire production, investing in its existing facilities and also building new plants. Below is the list of future projects for the coming years with their characteristics:

- **Project Carnalita (Potassium Chloride)**
  - Investments: US$ 1,8 billion
  - Production capacity
    - KCI: 1200 Kty (extension: 600-1200 Kty)

- **Project Salitre (Rock Phosphate and SSP)**
  - Investments: US$ 1,0 billion
  - Production capacity
    - Rock: 1100 Kty (extension: 2200 Kty)
    - SSP: 500 Kty

4.4.4. Corprebras' investments

Coprebras' investments include both the improvement and expansion of existing sites but also Brownfield investments.

- **Project Ouvidor, Catalão and Cubatão (Improvement)**
  - Investments:US$ 150 million

- Production capacity
  - Phosphate concentrate: 330 Kty
  - Phosphoric acid (Catalão): 50 Kty
  - Sulfuric acid (Cubatão): 100 Kty

- **Project Goiás (for approval)**
  - Investments: US$ 1,0 billion (Brownfield Project)
  - Production capacity
    - Phosphate concentrate: 1400 Kyta
    - Dicalcium: 200 Kta
    - Phosphoric acid: 500 Kty
    - Sulfuric acid: 1100 Kty

4.4.5. AMECO's market prospects

The fertilizer market has two key features for AMECO:

- A buoyant market
- A market in which AMECO has the most references.

Moreover, the success of AMECO is struck with the winning tender for Petrobras' project "UFN III" and the sale of a reclaimer which costs more than 1, 6 million euros.

This potentially represents more than 6 other machines (about 10 million euros of sales) in the next few years, one for each new plant which will be built or transformed:

1. Petrobras : UFN IV
2. Petrobras : UFN V
3. Vale : Project Carnalita
4. Vale : Project Salitre
5. Coprebras : Project Ouvidor, Catalão and Cubatão
6. Coprebras : Project Goiás

4.5. POWER GENERATION

Certainly far behind the fertilizer industry, power generation is still a target market for AMECO, representing 4%of its references worldwide. Even if all machines have been sold to the coal market, the analysis will not be restricted to this particular segment and another bulk material will be considered, which is the sugar cane bagasse.

4.5.1. General Trends

The growing demand for energy will materialize in future investments in thermal power plants. These projects are interesting opportunities for AMECO.

4.5.1.1. Trends in consumption

AMECO's customers are industrial companies or power plants. Therefore, the analysis will focus only on the energy sector and the industrial sector (Fig.13). It should be noted that these two sectors have continuously accounted for half of the country's energy consumption since 2002 (MME/EPE, 2012a).

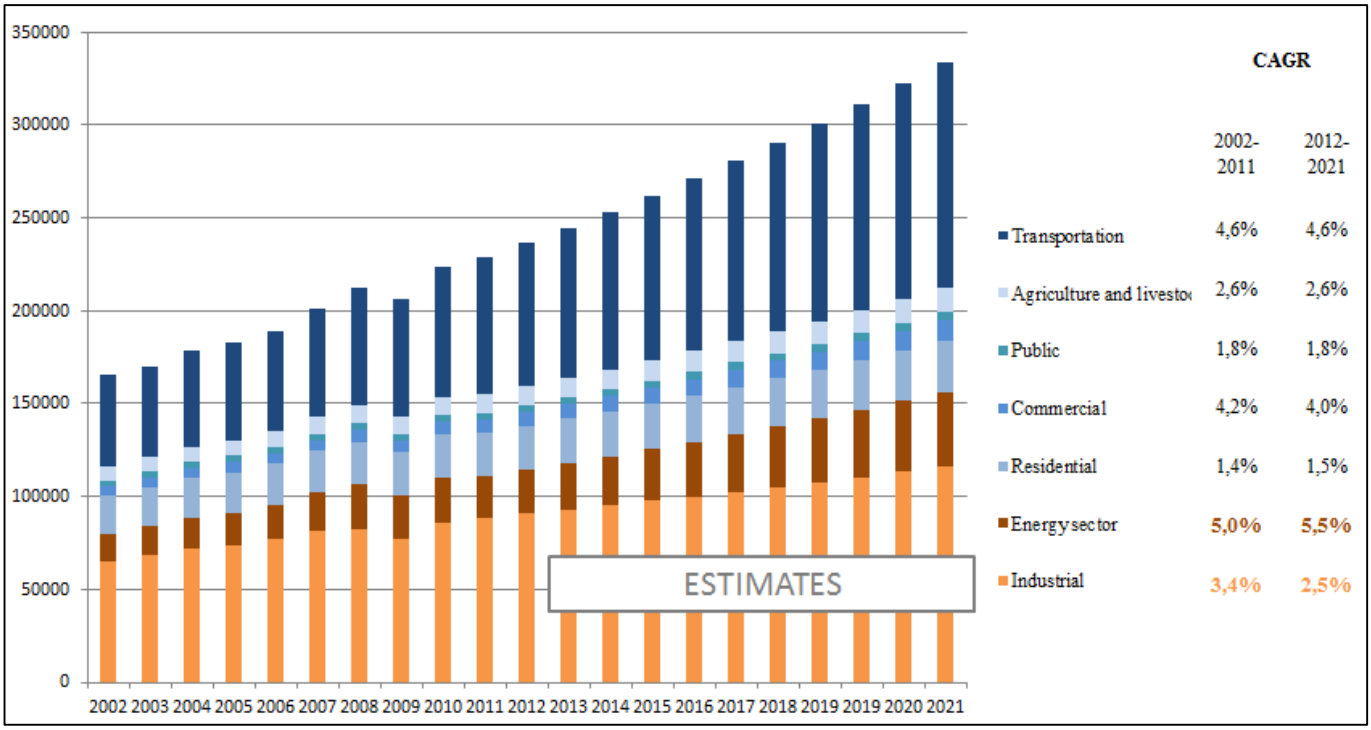


Fig.13 – Energy consumption by sector in Brazil 2002-2021 (10^3 toe) (MME/EPE, 2012a)

The consumption in the industrial sector has grown by 3.9% per year until 2008, then it has collapsed (-6, 8% between 2008 and 2009) and it has finally returned to a growth of 3.4% thereafter. The industrial sector is very sensitive to global economic conditions. Thus as the graph reveals (Fig.13), the drop is momentary and it can be easily related to the financial crisis. This effect is quite similar to the energy sector, which has known a regular growth of about 7% until 2008 and then a lowering consumption of about 3%.

Brazil continues its development and energy needs are still growing. From 2002 to 2011, the energy sector's growth was about 5, 0% p.a. However, because of rising demands, it should be close to 5, 5% p.a. from 2011 to 2012. In the coming years, the energy sector's main drivers will be: the enrichment of the middle class and the growing demand of energy transformation and energy extraction (especially the oil & gas sector). The growth of the industry sector has been around 3.4% p.a. over the decade and will fall in the next decade to reach 2.5% p.a. It is expected that the industry will slow down, mainly due to the increase in salaries in the sector and because of the appreciation of Reais.

Starting from macroeconomic data and published analyzes, the current situation and the outlook in the medium term in the two markets could be summarized in this table (Table 2).

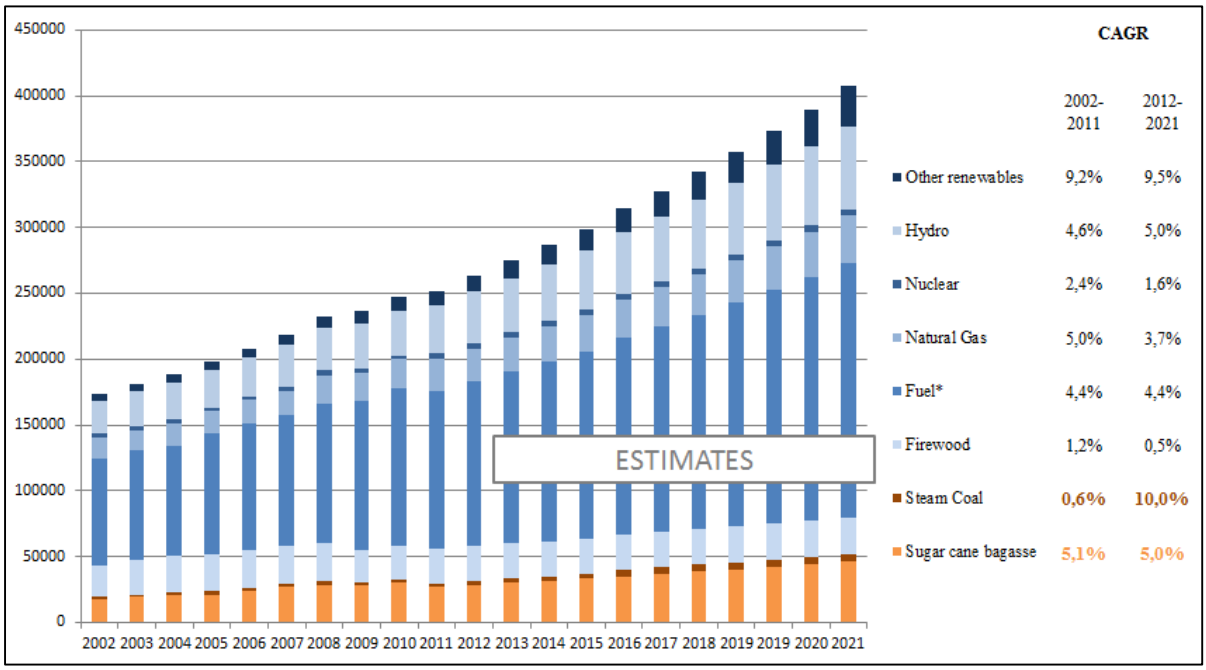
	Trend	Comment
Coal		Growing consumption in respect of : • The scenario of strong growth in the iron & steel industry • Increasing electricity consumption
Bagasse		Large increase in the energetic sector, reflecting the greater effort of distilleries in favor of the production of ethanol.

Table 2–Trends and comments for both power generation segments

4.5.1.2. Current production and forecast

To sustain its economic growth, Brazil has been investing in the production of energy, since the annual growth rate has been about 4, 3% between 2002 and 2011 for all types of energy (MME/EPE, 2012a). Looking more closely the digits, differences between sources are significant. The primary energies that drive the growth are mostly renewable energies, such as wind and solar (+9, 2% p.a.), sugar cane bagasse (+5, 1%/ p.a.) and the hydro power (+4, 6%/p.a.) (Fig.14) (MME/EPE, 2012b).

Since AMECO can only work with solid materials, its machines can only carry steam coal, firewood and sugar can bagasse. However firewood is used only individually by the locals and there is no industrial process over this material. Indeed, there is no future market for AMECO over this sub-segment. We therefore focus on steam coal and sugar cane bagasse (MME/EPE, 2012b).



** Petroleum + Ethanol*

Fig.14– Primary energy production in Brazil between 2002 and 2021 (10^3 toe)

Considering the two energies listed as interesting for AMECO, the growth in that period is about 4.7% p.a. Above all, since 2008; both of them have been facing a drop: 1.6% p.a. for sugar cane bagasse and 7.5% p.a. for steam coal. Below is a more detailed explanation of the three energy sources (MME/EPE, 2012b):

- **Unsteady growth of the production of sugar can bagasse** (+5, 1% p.a. between 2002 and 2011). The production of firewood has increased strongly between 2002 and 2010 with an annual growth of about 7%. However between 2010and 2011, the industry has undergone an abrupt drop of about 9% p.a.
- **Stabilization of the production of coal** (+0, 6% p.a. between 2002 and 2011). The production has been growing about 5% p.a. from 2002 to 2008, and has declined sharply between 2008 and 2009 (about 22%). Since 2009, the production has been completely stagnant.

Regarding the future of markets, the situation is slightly different. It is expected that the sugar cane bagasse will increase by the same amount over the period (5% p.a.). However important investimments are planned during the decade with the construction of four coal power plants. These

new plants will more than double production in the country, and they will explain the high growth rate of around 10% p.a.

4.5.2. Coal

The coal accounts for a very small share of Brazil's energy supply (~5%) and despite being abundant in the country, accounting for 7 billion tones (46% of Brazilian fossil-fuel reserves); the resource is of relatively low quality. The high ash and sulfur content with low caloric value of the domestic reserves limit the use of coal in a large scale (PSI Media Inc., 2009).

4.5.2.1. Trends in consumption

The market will be driven by the iron and steel consumption (≈ 3.4% p.a.) and by the electricity sector (≈ 12.2% p.a.). The coal consumption strongly depends on the growth of the Steel industry (70% of coal consumption and ≈3.4%% p.a.) (MME/EPE, 2012a).

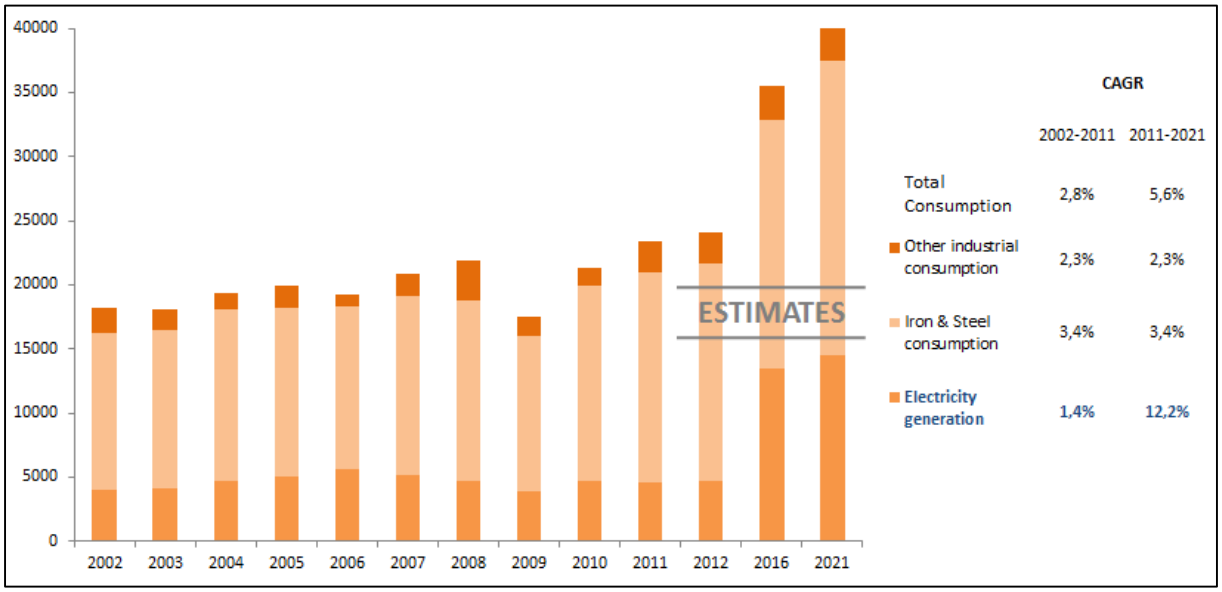


Fig.15 - Coal's consumption by sector in Brazil between 2002 and 2021 (k tons)

4.5.2.2. Production and import

The production is about 5,4 million tons per year and is concentrated in the south region of the country: 3,1 million tons in Rio Grande do Sul, 2,2 million tons in Santa Catarina and 100 thousand tones in Paraná (MME/EPE, 2012a).

The production of steam coal has stagnated over the analyzed period, with an average of growth of 0, 8%. Moreover, the production of metallurgical steam has stopped since 2010 (MME/EPE, 2012a).

Due to the characteristics of domestic coal, the demand for metallurgical coal is met by importation. In contrast, the demand for steam coal has been met almost entirely by domestic production. Thus 85% of the coal produced in Brazil is fired in power plants, which are all located in the three southern states. The remainder 15% is consumed for heat generation in the industrial sector (MME/EPE, 2012a).

The rest of 23, 3 million tons of coal consumed in Brazil is imported from China and also from the U.S., Australia, Canada and South Africa (PSI Media, 2009). The proportion of imported coal has even increased from 72% to 78% between 2002 and 2011 (MME/EPE, 2012a).

4.5.2.3. Production outlook

The generation of electricity from coal will triple in Brazil in the next five years (Fig.16), especially due to the ACU project, which consists of 4 plants of 525 MW each2011 (MME/EPE, 2012b).

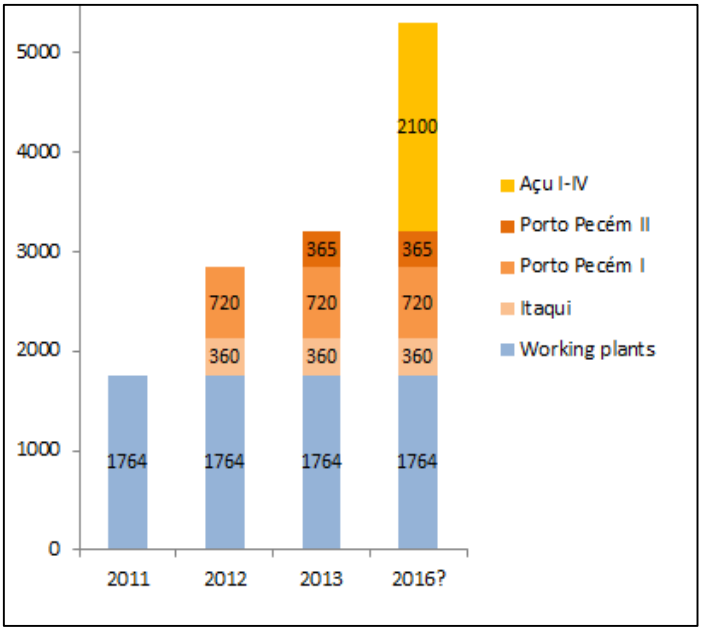


Fig.16 - Electricity generation by the coal power plants (MW)

Four coal plants are planned to be built in Brazil by the company MPX in the next five years. These plants will be provided in coal by MPX's mines located in Colombia. These power plants are the result of a global strategy, which aims to create a fully integrated mining system[21].

However, only one project is likely to be a market for AMECO, because MNX has already found its subcontractor for the three other projects (Table 3).

[21]Interviews of MPX's management

	Itaqui	Porto Pecém I	Porto Pecém II	Açu I-IV
Engineering	100%	100%	100%	25%
Procurement	**100%**	**100%**	**100%**	**0**
Construction	98%	98%	85%	0
Equipment	1 reclaimer	2 reclaimers	1 reclaimer	4 reclaimers
Results	✗	✗	✗	?

Table 3 - Progress of the construction of coal power plants

4.5.2.4. AMECO's market prospects

Through interviews we have realized at MNX, the company will order doubtless the same product from the same subcontractor, for obvious reasons of administrative simplification and economies of scales[22].

In other words, it does not seem to have a market for AMECO, both in the short-term and in the medium-term in the coal sector.

[22]Interviews of MPX's management

4.5.3. Sugar cane products

Brazil is the world leading producer of sugar cane bagasse, but there is still a huge remaining potential.

4.5.3.1. Trends in consumption

Bagasse is the residue of sugar canes, mainly used for the production of ethanol. Thus bagasse consumption is intrinsically linked to ethanol production in the country. Due to its large potential energy, it is used mainly for self-consumption of the plants of the sugarcane industry, generating electricity and thermal energy for the production of sugar and ethanol. However, in view of its potential, it is still a small contribution of bagasse in electricity sales in Brazil (MME/EPE, 2012a).

From 2002 to 2011, the average annual growth has been estimated at around 6.2% (Fig1 3). Only two sectors drive the growth of bagasse in Brazil, which are the food and beverages sector and the energy sector. AMECO could not be positioned on the first sector. However, the power generation sector could be seen as an opportunity (Fig.17) (MME/EPE, 2012a).

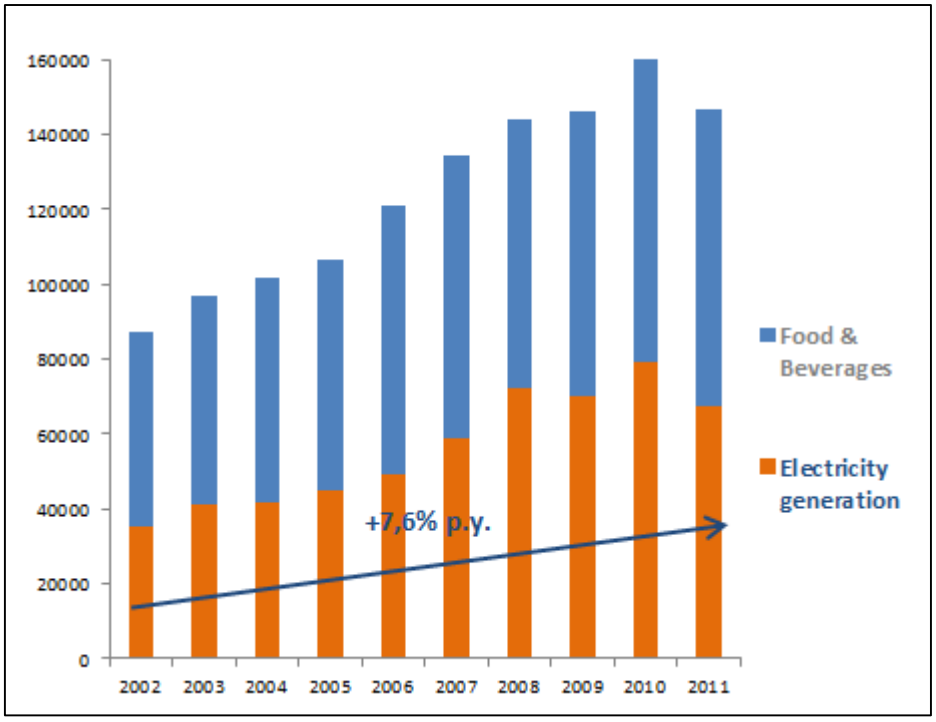


Fig 17 - Sugar cane bagasse's consumption by sector in Brazil between 2002 and 2011 (k tons)

4.5.3.2. Current production

Brazil is the leading producer of sugar canes with 570 million tons produced for the 2011/2012 harvest. About half is intended to the production of ethanol and 50% for sugar and alcohol. The production of sugar cane bagasse has increased steadily in Brazil over the period (MME/EPE, 2012a).

The Federal Government has adopted incentives to promote the renewal of cogeneration facilities. Brazil is investing in its thermal power generation, especially bagasse power plants, to support its economic development. It is not the government that invests in the development of these power plants but industrial actors which are not connected to the national grid or which prefer this source of energy not to suffer from blackouts (Fig.18) (MME/EPE, 2012a).

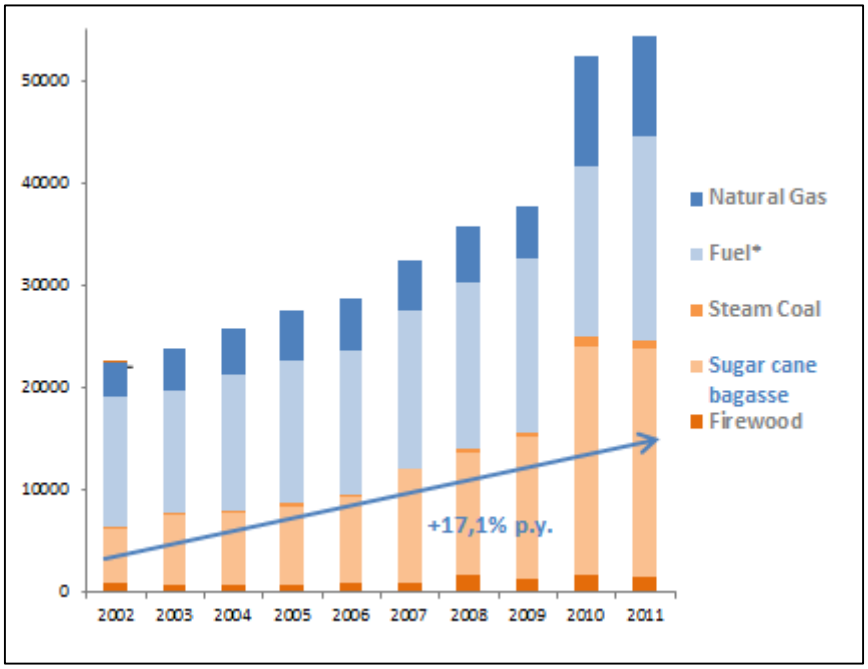


Fig.18 -Energy consumption by self producers' power plants in Brazil (2002-2011) (GWh)

In 2011, there are 360 bagasse power plants in Brazil, but only 38 are sized large enough to use AMECO equipment, which represent 11% of the total number (Fig.19). 60 MV is considered as a minimum to automate the production and to use AMECO's equipment (MME/EPE, 2012a).

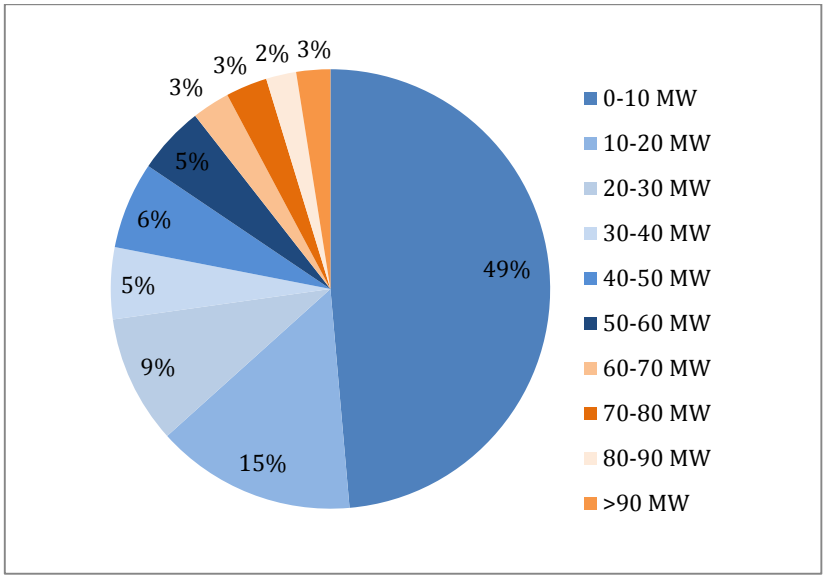


Fig 19–Distribution of number of bagasse power plants in Brazil in 2011

However with only 11 % of the total number of plants, they account for 38% of the electricity generation in Brazil (Fig.20). They thus produce 3 million of the 8 million MV generated by bagasse power plants in the country (MME/EPE, 2012a).

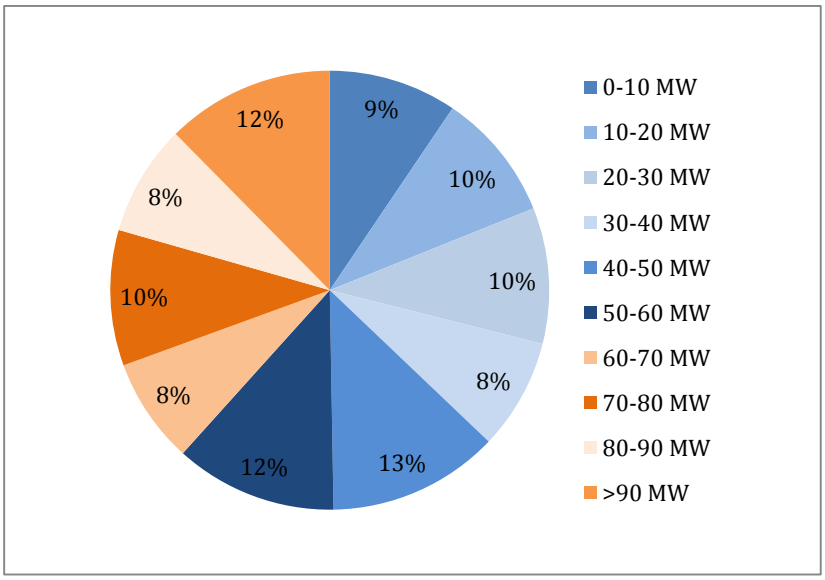


Fig.20–Power generation of bagasse power plants in Brazil in 2001

4.5.3.3. Production outlook

Considering that the growth will be identical (6.2% p.a.) and the distribution between the different sizes will be the same, we can deduce the number of power plants that will be potentially a market for AMECO (Fig.21). Indeed, the number of plants will almost double, which will be 30 factories in 10 years, or 3 per year (MME/EPE, 2012b).

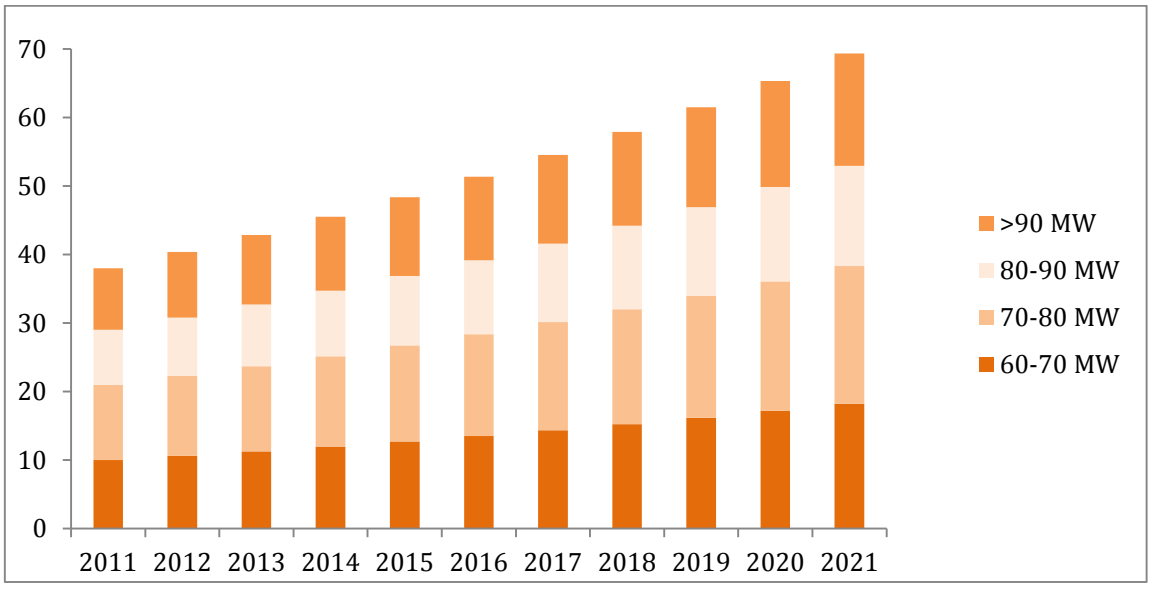


Fig.21 – Evolution of the number of bagasse power plants in Brazil between 2011 and 2021

4.5.3.4. AMECO's market prospects

It is assumed that there would be the need of one machine per plant (30 machines) and the average selling price is estimated at around 500 000 euros. Therefore the market for AMECO is estimated at around 15 million euros for the next decade and around 1.5 million euro par year.

5. CONCLUSION

According to the elements of the study, it is now possible to take a decision on Ameco's investment in the Brazilian market and to know exactly in which way the company can implement there. As a matter of fact, the conclusion firstly focuses on Brazil, then on the establishment of a subsidiary, and finally on the hiring of a V.I.E.

5.1. THE CHOICE OF BRAZIL

Because Petrobras is a current client, the presence of an employee appears to be necessary to monitor the sale of the equipment. As explained before (p.25), *"the establishment of mutual trust with intermediaries considerably facilitates the conduct of business. Trust is a central element in a country such as Brazil, where personal and human relationships are essential".* Furthermore, a local presence appears to be a key element with the objectives to sell other equipment to Petrobras and to build stronger relationships with other potential clients such as Vale and Coprebras.

Moreover, based on the analysis of the fertilizer market and the power generation market, AMECO's CEO had reason to be interested in Brazil:

1. **Fertilizer industry.** As expected, the fertilizer industry is the flagship sector for AMECO with a high growth in the near future. Thus the sale of a machine to Petrobras reveals the potential of this market for AMECO.
2. **Power generation**. Contrary to the assumptions, the coal market has proved to be interesting due to the current construction of major projects. Thus, AMECO should have had positioned itself and competed against the current holder of the market a few years ago. However, another market, very specific to Brazil, is promising for the company, the bagasse industry. This would represent a market of almost 15 million euros for the next decade and AMECO could easily be present in this market.

For each sector, the market is estimated at around 15 million euros, which makes a total market of 30 million euros. A realistic sales' objective could be from 5 to 10 equipment in the period, meaning from 5 million to 10 million euros.

5.2. THE CHOICE OF A SUBSIDIARY

In Brazil, only a local company can hire employees[23]. Thus since AMECO wishes to have a representative in Brazil, it is mandatory to create an office. Three options are available in Brazil:

5.2.1. Domiciliation

Domiciliation corresponds to the registered address of the company, meaning a place where the company's mail is received and all legal documents are kept[24]. This is the fastest, the most flexible way to have a local presence in Brazil. Many companies offer this service; however the price is extremely high and does not fit into AMECO's budget[25].

5.2.2. Liaise office

According to article 1.134 of Law nº 10.406/2002 ("Brazilian Civil Code"), for a foreign company to act directly in Brazil - which means the opening of a local branch or office, it is necessary to obtain a previous authorization from the Brazilian Federal Government. For this purpose, it is necessary to present to the Brazilian Government and to publish in official newspapers several documents from the foreign company, duly signed before a Public Notary in its country of origin, legalized at the Brazilian consulate, translated into Portuguese by a public translator and then registered at Brazilian Public Notary's office[26].

This authorization from the Brazilian Federal Government usually involves a lot of cost and bureaucracy, and as a consequence it takes a lot of time. As established in article 1.135 of Brazilian Civil Code, in order to protect national interests, the government can present several requirements to the foreign company, which shall accomplish such impositions for the granting of the above mentioned authorization[27].

After obtaining the official authorization to act directly in Brazil, the foreign company must formalize the registration of its corporate documents at the Board of Trade of the state of Brazil in which the headquarters of the company will be established. Also, the headquarters office in Brazil will need

23 According to Ubifrance's lawyers
24 According to Ubifrance's lawyers
25 According to Ubifrance's lawyers
26 According to Ubifrance's lawyers
27 According to Ubifrance's lawyers

several authorizations from our public bodies, in the same way as if it was a Brazilian subsidiary company[28].

5.2.3. Subsidiary

Because of all bureaucracy involved in the opening process of a branch or office in Brazil by a foreign company, it is usually recommended the opening of a Brazilian subsidiary (new company), which does not need to face the authorization procedure with Brazilian Federal Government[29].

If there are many forms of organizing a business, only two company forms shall be considered by AMECO for purposes of Brazilian subsidiary. There are the "limitada" (or limited liability company) – a hybrid between a corporation and a partnership; and the "sociedade anônima", which is the basic corporation form in Brazil[30].

It is highly recommended to incorporate the subsidiary under a "limitada" structure, once its formalities would be rather simpler and less expensive[31].

A law firm is mandatory to take care of all the administrative procedures, which are related to the creation of such a structure. Ubifrance, the French agency for export promotion, has preferential rates with lawyers, and offers this service for exactly 6 600 euros.

5.3. THE CHOICE OF A V.I.E.

AMECO can appeal to the French government, which supports its SMEs to settle abroad. As described in the literature review section (p.25), "*governments provide promotion plans, which consist mainly of tax rebates, loans and donations*".

In the case of France, the government offers a very specific employment contract, for which the company does not have to pay any employer contributions. This contract, which is called the "*Volontariat International d'Entreprise*" (V.I.E.), significantly reduces labor costs. A twelve-month contract costs around 30 000 euros.

[28] According to Ubifrance's lawyers
[29] According to Ubifrance's lawyers
[30] According to Ubifrance's lawyers
[31] According to Ubifrance's lawyers

5.4. COSTS ESTIMATE

As mentioned before (p.20), "*SMEs face disproportionate risks in their international expansion*". As a consequence, a careful analysis of the costs of entering the market should be taken into account.

The estimated costs are much lower than the benefits that AMECO can expect from the Brazilian market. Taking into account AMECO's cost structure, annual costs will be about 50 000 euros:

- **Lawyer costs**: 6 600€[32] (only the first year for the open of the subsidiary)
- **Labor costs**: 30 000€[33]
- **Rent costs**: 12 000€[34]
- **Accounting fees**: 6 000€[35]

Without going into more details, the sale of the equipment to Petrobras has already allowed the return of investment for the first year. Hereafter, the sale of a machine per year would allow the company remaining profitable.

5.5. FUTURE STEPS

The entry into the Brazilian market will be done in several steps:

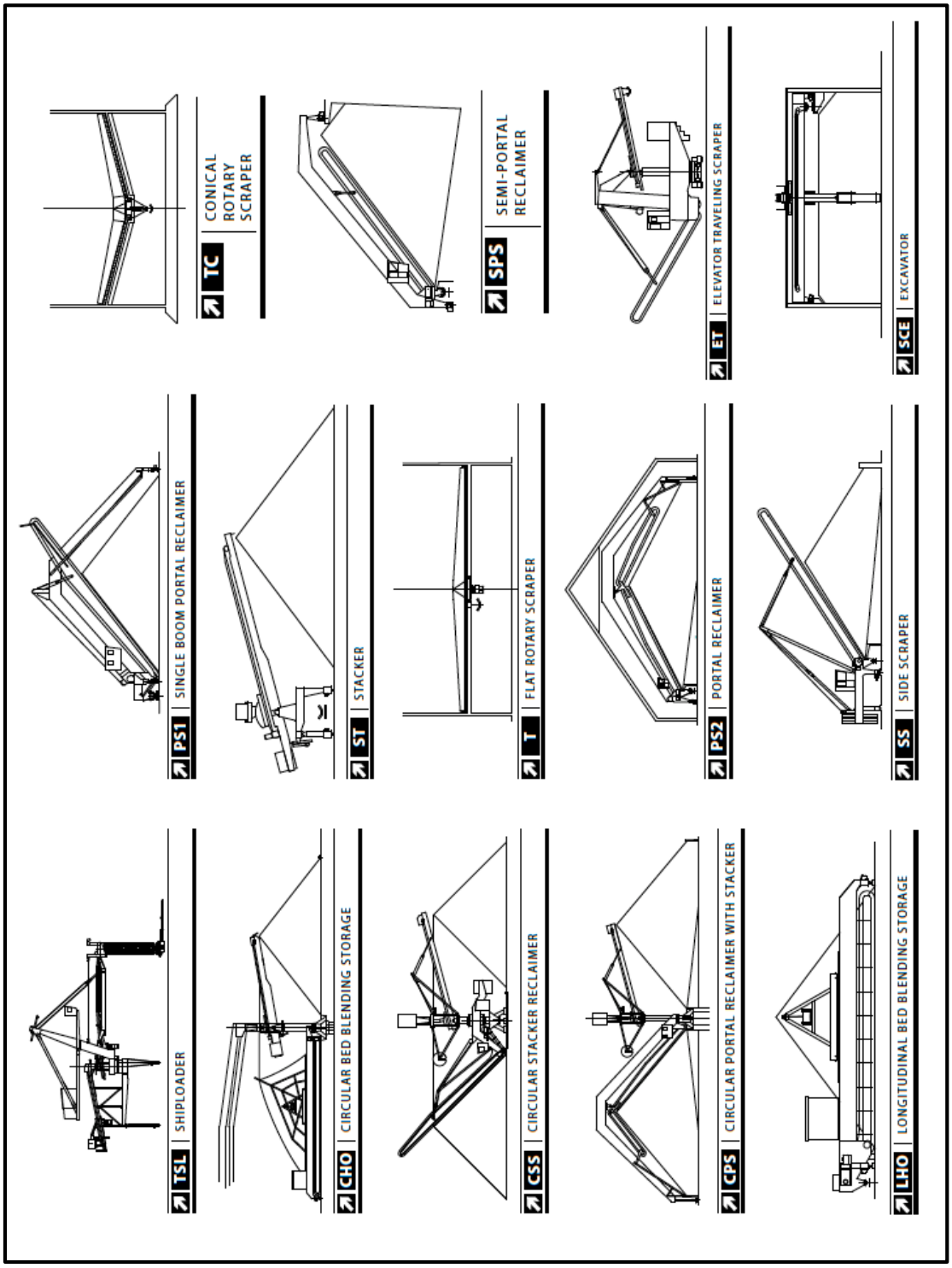
1. **Export** the reclaimer**, ordered by Petrobras, which is scheduled for the end of 2014.**
2. **Send a sales agent on site**. It is essential to monitor the sale and become a key partner for the giants of fertilizers in Brazil. The main objective is to keep the next projects made by Petrobras, and use this reference as a flagship to convince other competitors.

Other steps, which were initially planned, such as the investment in a production facility, do not seem to be necessary, according to the relatively small size of the market. Moreover it would change too deeply the company's business model.

[32] According to Ubifrance's lawyers
[33] According to Ubifrance's advisors
[34] According to Ubifrance's advisors
[35] According to Ubifrance's advisors

6. ANNEX

Annex 1[36] - AMECO's complete product line



[36] http://www.ameco-tm.com/references/

Annex 2[37]& 3[38]- AMECO Shiploaders

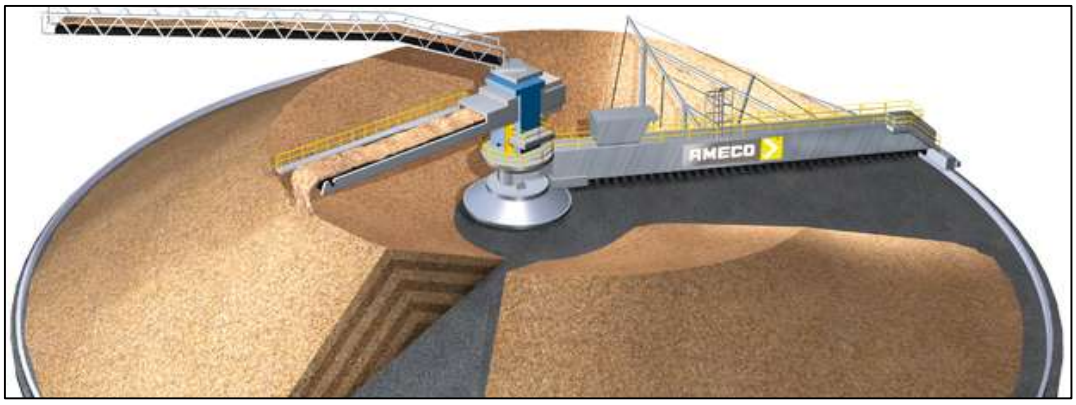
[37]http://www.ameco-tm.com/shiploader/

[38]http://www.ameco-tm.com/shiploader/

Annex 4[39]– AMECO Stackers

Annex 5[40] – AMECO Portal reclaimer

Annex 6[41] – AMECO Circular blending system



[39] http://www.ameco-tm.com/products/stackers/
[40]http://www.ameco-tm.com/fertilizer-industry/

[41]http://www.ameco-tm.com/index.php?s=blending&Submit=Go

7. REFERENCES

- Aaby, N. E., & Slater, F. S. (1989). Management influences on export performance: a review of the empirical literature 1978-88. [Electronic version]. *International Marketing Review*, 6, 7-26.
- Alon, I. (2004). International market selection for a small enterprise: a case study in international entrepreneurship. [Electronic version]. *SAM Advanced Management Journal*, 69, 25-33.
- ANDA. (2012). *Indústria nacional de matérias-primas para fertilizantes: investimentos (2012 – 2017).*[Electronic version]. São Paulo: ANDA.
- ANDA. (2011). *Investimentos no Brasil.* [Electronic version]. São Paulo: ANDA.
- Armario, J. M., Ruiz, D. M., & Armario, E. M. (2008). Market orientation and internationalization in small and medium-sized enterprises. [Electronic version]. *Journal of Small Business Management*, 46, 485-511.
- Autio, E., Sapienza, H. J., Almeida, J. G. (2000). Effect at age of entry, knowledge intensity, and imitability on international growth. [Electronic version]. Academy of Management Journal, 43, 909-924.
- Baird, I. S., Lyles, M. A., & Orris, J. B. (1994). The choice of international strategies by small businesses. [Electronic version]. *Journal of Small Business Management,* 32, 48-59.
- Barros, B.T., & Prates, M.A.S. (1996). *O estilo brasileiro de administrar*. Sao Paulo: Atlas.
- Beal, R. M. (2000). Competing effectively: environmental scanning, competitive strategy, and organizational performance in small manufacturing firms. [Electronic version]. *Journal of Small Business Management,* 38, 27-47.
- Bell, J., McNaughton, R., Young, S., &Crick, D. (2003). Towards an integrative model of small firm internationalisation. *Journal of International Entrepreneurship*, 1, 339-362.
- Bello, D. C., & Lohtia, R. (1995). Export channel design: the use of foreign distributors and agents. [Electronic version]. *Journal of the Academy of Marketing Science*, 23, 83-93.
- Bilkey, W. J., & Tesar, G. (1977). The exporter behavior of smaller-sized Wisconsin manufacturing firms. [Electronic version]. *Journal of International Business Studies*, 8, p.93-98.
- Brouthers, K. D., & Nakos, G. (2004). SME entry mode choice and performance: a transaction cost perspective. [Electronic version]. *Entrepreneurship: Theory and Practice*, 108, 229-247.
- Brouthers, L. E., Nakos, G., Hadjimarcou, J., & Brouthers, K. D. (2009). Key factors for successful export performance for small firms. [Electronic version]. *Journal of International Marketing,* 17, 21-38.
- Cadogan, J. W., Kuivalainen, O., & Sundqvist, S. (2009). Export market-oriented behavior and export performance: quadratic and moderating effects under differing degrees of market

dynamism and internationalization. [Electronic version]. *Journal of International Marketing,* 17, 71-89.

- Calof, J. L. (1993). The impact of size on internationalization. [Electronic version]. *Journal of Small Business Management*, 31,60-69.
- Cavusgil, S. T. (1980). On the internationalization process of firms. [Electronic version]. *European Research,* 8, 273-281.
- Child, J., & Rodrigues, S. B. (2007). The process of SME internationalization: British firms entering Brazil. [Electronic version]. *Economia e Gestão*, 7, 31-55.
- Couto, J. P., Tiago, M. T., Vieira, J. C., & Silva, F. J. (2008). The Propensity and intensity of export activities of companies operating in Europe. [Electronic version]. *Journal of Applied Business Research,* 24, 83-96.
- Davig, W. (1986). Business strategies in smaller manufacturing firms. [Electronic version]. *Journal of Small Business Management*, 24, 38-46.
- Dunning, J. H. (2001). The eclectic (OLI) paradigm of international production: past, present and future. [Electronic version]. *Journal of the Economics of Business*, 8, 173-190.
- Ekeledo, I., & Sivakumar, K. (1998). Foreign market entry mode choice of service firms: a contingency perspective. [Electronic version]. *Journal of the Academy of MarketingScience,* 26, 274-292.
- Galbraith, C. S., Rodriguez, C. L., & DeNoble, A. (2008). SME competitive strategy and location behavior: an exploratory study of high-technology manufacturing. [Electronic version]. *Journal of Small Business Management*, 46, 183-202.
- Gankema, H., Snuif, H., & Zwart, P. (2000). The internationalization process of small and medium-sized enterprises: an evaluation of stage theory. [Electronic version]. *Journal of Small Business Management,* 10, 15-27.
- Hagen, B., Palamara, G., Zucchella, A., Cerchiello, P., &De Giovanni, N. (2008). International strategies of SMEs: mapping strategic clusters. [Electronic version]. *International Business Review*, 1, 1-30.
- Henisz, W. J. (2000). The institutional environment for economic growth. [Electronic version]. *Economics and Politics,*12, 1-31.
- Hofstede, G. (1980). *Culture's consequences: international differences in work-related values.* Beverly Hills: Sage.
- Hofstede, G. (1994). *Cultures and organizations: software of the mind.* London: HarperCollins.
- Hofstede, G. (2001). *Culture's consequences: comparing values, behaviors, institutions and organizations across nations.* Thousand Oaks: Sage.

- Hultman, M., Robson, M. J., & Katsikeas C. S. (2009). Export product strategy fit and performance: an empirical investigation. [Electronic version]. *Journal of International Marketing*, 17, 1-23.
- INSEE. (2008). Petite et Moyenne Entreprise / PME. Available on: <http://www.insee.fr/fr/methodes/default.asp?page=definitions/petite-moyenne-entreprise.htm>. (Accessed in 11 Oct. 2012).
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm – a model of knowledge development and increasing foreign market commitments. [Electronic version]. *Journal of International Business Studies*, 8, 23-31.
- Johanson, J., & Vahlne, J.E. (1990). The Mechanism of internationalization. [Electronic version]. *International Marketing Review*, 7,11-24.
- Johanson, J., & Wiedersheim-Paul, P. E. (1975). The internationalization of the firm: four Swedish cases. [Electronic version]. *The Journal of Management Studies*, 12, 306-307.
- Kalantaridis, C. (2004). Internationalization, strategic behavior; and the small firm: a comparative investigation. [Electronic version]. *Journal of Small Business Management*, 42, 245-262.
- Kamakura, W. A., Ramon-Jeronimo, M. A., & Vecino Gravel, J. D. (2012). A dynamic perspective to the internationalization of small-medium enterprises. [Electronic version]. *Journal of the AcademyofMarketingScience*, 40, 236-251.
- Karagozoglu, N., & Lindell, M. (1998). Internationalization of small and medium-sized technology-based firms: an exploratory study. [Electronic version]. *Journal of Small Business Management*, 1, 44-59.
- Katsikea, E. S., Theodosiou, M., Morgan, R. E., & Papavassiliou, N. (2005). Export market expansion strategies of direct-selling small and medium-sized firms: implications for export sales management activities. [Electronic version]. *Journal of International Marketing*, 13, 57-92.
- Knight, G. (2000). Entrepreneurship and marketing strategy: the SME under globalization. [Electronic version]. *Journal of International Marketing*, 8, 12-32.
- Knight, G. A., & Cavusgil, S. T. (1996). The born global firm: a challenge to traditional internationalization theory. [Electronic version]. *Advances in International Marketing*, 8, 11-26.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organization capabilities, and the born global firm. [Electronic version]. *Journal of International Business Studies*, 35, 124-141.
- Koh, A. C. (1989). An evaluation of the current marketing practices of United States firms. *Developments in Marketing Science*, 7, 198-203.
- Kothari, V. (1989). Overseas strategies of small business – a longitudinal study. *European Business Review*, 4, 153-167.

- Lee, H., Kelley, D., Lee, J., & Lee, S. (2012). SME survival: the impact of internationalization, technology resources, and alliances. [Electronic version]. *Journal of Small Business Management*, 50, 1-19.
- Leonidou, L. C. (1998). Factors stimulating export business: an empirical investigation. [Electronic version]. *Journal of Applied Business Research*, 14, 43-68.
- Leonidou, L. C., & Katsikeas, C. S. (1996). The export development process: an integrative review of empirical models. *Journal of International Business Studies*, 27, 517-551.
- Leonidou, L. C., & Katsikeas, C. S. (2010). Integrative assessment of exporting research articles in business journals during the period 1960–2007. *Journal of Business Research*, 63, 879–887.
- Leonidou, L. C., Katsikeas, C. S., & Piercy, N. F. (1998). Identifying managerial influences on exporting: past research and future directions. [Electronic version]. *Journal of International Marketing*, 6, 74-102.
- Les Echos (2009). Itau Unibanco prédit un boom des investissements au Brésil. Available on: < http://archives.lesechos.fr/archives/2009/lesechos.fr/12/14/300396546.htm>. (Accessed in 11 Oct. 2012).
- Les Echos (2012).Bruxelles s'alarme de la désindustrialisation de l'Europe. Available on: <http://www.lesechos.fr/economie-politique/monde/actu/0202315977979-bruxelles-s-alarme-de-la-desindustrialisation-de-l-europe-370693.php>. (Accessed in 11 Oct. 2012).
- López-Duarte, C., & Vidal-Suárez, M. (2010). External uncertainty and entry mode choice: cultural distance, political risk and language diversity. [Electronic version]. *International Business Review*, 19, 575-588.
- Lu, J., & Beamish, P. (2001). The internationalization and performance of SMEs. [Electronic version]. *Strategic Management Journal*, 22, 565-586.
- Madsen, T. K., & Servais, P. (1997). The internationalization of born globals: an evolutionary process?. [Electronic version]. *International Business Review*, 6, 561-583.
- Martin, J. H., Martin, B. A., & Minnillo, P. R. (2009). Implementing a market orientation in small manufacturing firms: from cognitive model to action. [Electronic version]. *Journal of Small Business Management*, 47, 92-115.
- Miesenbök, K. J. (1988). Small businesses and exporting: a literature review. [Electronic version]. *International Small Business Journal*, 2, p. 42-61.
- Miles, R.E., & Snow, C. (1978). *Organizational Strategy, Structure and Process*. New York: McGraw Hill.
- Miocevic, D., & Crnjak-Karanovic, B. (2011). Cognitive and information-based capabilities in the internationalization of small and medium-sized enterprises: the case of Croatian exporters. [Electronic version]. *Journal of Small Business Management*, 49, 537-557.

- MME/EPE. (2012a). *Brazilian Energy Balance 2012*. [Electronic version]. Brasília: Ministério de Minas e Energia / Empresa de PesquisaEnergética.
- MME/EPE. (2012b). *Plano Decenal de Expansão de Energia 2021*. [Electronic version]. Brasília: Ministério de Minas e Energia / Empresa de PesquisaEnergética.
- Moen, O., & Servais, P. (2000). Born global or gradual global? Examining the export behavior of small and medium-sized enterprises. [Electronic version]. *Journal of International Marketing*, 10, 49-72.
- Morgan, N. A., Katsikeas, C. S., & Vorhies, D. W. (2012). Export marketing strategy implementation, export marketing capabilities, and export venture performance. [Electronic version]. *Journal of the Academyof MarketingScience*, 40, 271-289.
- Namiki, N. (1988). Export strategy for small business. [Electronic version]. *Journal of Small Business Management*, 26, 32-37.
- OECD. (2009). *Agricultural policies in emerging economies: monitoring and evaluation*. [Electronic version]. Paris: OECD.
- OECD. (2010). *Growth and sustainability in Brazil, China, India, Indonesia and South Africa.* [Electronic version]. Paris: OECD.
- OECD. (2010). *Perspectives économiques de l'Amérique latine 2011: Une région de classes moyennes?*. [Electronic version]. Paris: OECD.
- OECD. (2011). *Fostering productivity and competitiveness in agriculture*. [Electronic version]. Paris: OECD.
- OECD. (2012). "Brazil", in *Main economic indicators, Volume 2012/7, July*. [Electronic version]. Paris: OECD.
- OECD. (2012). "Port infrastructure needs to 2030: background to global estimates", in *Strategic transport infrastructure needs to 2030*. [Electronic version]. Paris: OECD.
- OECD/FAO. (2011). *Agricultural outlook 2011-2020*. [Electronic version]. Paris: OECD.
- OECD/FAO. (2012). *Agricultural outlook 2012-2021*. [Electronic version]. Paris: OECD.
- OECD/IEA. (2012). *Coal information*. [Electronic version]. Paris: OECD/IEA.
- OECD/IEA. (2012). *Energy balances of non-OECD countries*. [Electronic version]. Paris: OECD/IEA.
- OECD/IEA. (2012). *Natural gas information*. [Electronic version]. Paris: OECD/IEA.
- OECD/IEA. (2012). *Oil, gas, coal & electricity quarterly statistics*. [Electronic version]. Paris: OECD/IEA.
- OECD/IEA. (2012). *The global value of coal*. [Electronic version]. Paris: OECD/IEA.

- Ogbuehi, A. O., & Longfellow, T. A. (1994). Perceptions of U.S. manufacturing SMEs concerning exporting: a comparison based on export experience. [Electronic version]. *Journal of Small Business Management*, 1,37-47.
- Ogunmokun, G., & Ng, S. (2004). Factors influencing export performance in international marketing: a study of Australian firms. [Electronic version]. International Journal of Management, 21, 172-185.
- Oviatt, B. M., & McDougall, P.P. (1994). Toward a theory of international new ventures.*Journal of International Business Studies*, 25, 45-64.
- Oviatt, B. M., & McDougall, P. P. (1995). Global starts-up: entrepreneurs on a worldwide stage. *The Academy of Management Executive*, 9, 30-43.
- Pelham, A. M. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. [Electronic version]. *Journal of Small Business Management*, 38, 48-67.
- Porter, M. (1980). *Competitive strategy*. New York: Free Press.
- Porter, M. (1985). *Competitive advantage*. New York: Free Press.
- Rialp, A., Rialp, J., & Knight, G. A. (2005). The phenomenon of early internationalizing firms: what do we know after a decade (1993–2003) of scientific inquiry?. [Electronic version]. *International Business Review*, 14, 147–166.
- Sharma, D. D., & Blomstermo, A. (2003). The internationalization process of born globals: a network view. [Electronic version]. *International Business Review*, 12, 739-753.
- Souchon, A. L., Diamantopoulos, A., Holzmueller, H. H., Axinn, C. N., Sinkula, J. M., Simmet Blomberg, H., Durden, G. R. (2003). Export information use: a five-country investigation of key determinants. [Electronic version]. *Journal of International Marketing*, 11, 106-127.
- Steiner, M. P., & Solem O. (1988). Factors for success in small manufacturing firms. [Electronic version]. *Journal of Small Business Management*, 26, 51-56.
- Tanure, B., & Gonzalos-Duarte, R. (2005). Leveraging competitiveness upon national cultural traits: the management of people in Brazilian companies. [Electronic version]. *International Journal of Human Resource Management*, 16, 2201-2217.
- Toften, K., & Olsen S. O. (2004). The relationships among quality, cost, value, and use of export market information: an empirical study. [Electronic version]. *Journal of International Marketing*, 12, 104-131.
- Welsh, D., & Alon, I. (2001). *International franchising in emerging markets: Central and Eastern Europe and Latin America*. Washington: CCH Inc. Publishing.

- Wolff, J. A., & Pett, T. L. (2000). Internationalization of small firms: an examination of export competitive patterns, firm size, and export performance.[Electronic version]. *Journal of Small Business Management*, 38, 34-47.
- Zahra, S. A., & George, G. (2002). International entrepreneurship: the current status of the field and future research agenda. In Hitt, M. A., Ireland, R. D., & Camp, S. M.(Eds). *Strategic Entrepreneurship: Creating a New Mindset.* Oxford: Blackwell Publisher.
- Zucchella, A., Palamara, G., & Denicolai, S. (2007). The drivers of the early internationalization of the firm. [Electronic version]. *Journal of World Business,* 42, 268-280.