

**CASE STUDY: INTERNATIONALIZATION OF PORTUGUESE
SME TO THE BRAZILIAN MARKET**

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Thesis in the Master of
Business Economics and Competition

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RESUMO

Este projeto, tal como o nome revela, é um estudo do caso de uma pequena média empresa Portuguesa que concorre no mercado das soluções de energia renovável, nomeadamente no campo de aquecimento, ventilação e ar condicionado que tem a intenção de entrar no mercado Brasileiro. As principais questões investigadas são: qual a melhor estratégia de entrada no mercado, quais os riscos envolvidos e qual é o mercado alvo, seu potencial e seu desenvolvimento futuro.

A parte teórica introduz o Risco cultural, Risco do país, Risco cambial e Risco comercial tendo em conta as questões práticas relacionadas com o processo de internacionalização. O caso de estudo começa com a descrição da empresa juntamente com a revelação da sua estratégia comercial. A secção seguinte inclui o levantamento dos indicadores macroeconómicos mais relevantes e o seu histórico durante a última década. Na terceira secção, a análise setorial, aborda numa forma prática os indicadores importantes para a empresa. A última parte deste capítulo interliga os conceitos teóricos com os indicadores em termos das necessidades da empresa, estratégia comercial e estratégia da entrada.

Com base nos resultados foi concluído que a estratégia de internacionalização que oferece mais benefícios é o Investimento Direto Estrangeiro, e que o estado com melhor infraestrutura, ambientes político, social e económico é São Paulo. Em relação ao futuro do Brasil, a análise indica que com maior probabilidade o Brasil manterá as suas presentes tendências em termos do desenvolvimento e o crescimento económico.

Palavras-chave: Risco de Internacionalização, Investimento Direto Estrangeiro, Análise Macroeconómica, Análise Sectorial.

Códigos JEL: F20, F23

ABSTRACT

This final project is a case study of a Portuguese SME company competing in the field of renewable energy in the HVAC sector with the intention to enter the Brazilian market. The main research issues of this project are the best strategy for entering the market, the risks involved and the target market, its potential and the possible future development.

In the theoretical part, the Cultural risk, the Country risk, the Currency risk and the Commercial risk are introduced considering practical issues that are important for the internationalization process. The case study starts with the description of the company together with its current business strategy, followed by the section with the most important macroeconomic indicators of the country and their evolution over the last decade. Another part, the analyses of sectors, is assessing more practical indicators for the company, the entering strategy and the targeting of the market. The last part of this chapter presents the connection of the analyzed indicators with the theoretical part in terms of the company needs, business strategy and the entering strategy built.

Based on the results it was concluded that the internationalization strategy which represents the most benefits and advantages for the company is FDI and the state with the best infrastructures and political, social and economic environment is São Paulo. As for the future of Brazil, the analysis indicates that with the highest probability Brazil will maintain the current tendencies in terms of the economic development and the economic growth.

Key words: Internationalization Risk, Foreign Direct Investment, Macroeconomic Analysis, Sectorial Analysis.

JEL codes: F20, F23

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AICEP - Portuguese Agency for Investment and External Commerce

ANAC - National Agency for Civil and Aviation

ANATEL - National Agency of Telecommunications

ANTAQ - National Agency for Waterway Transportation

ANTT - National Land Transportation Agency

APEX - Brazilian National Promotional Agency

ASEAN - Association of Southeast Asian Nations

BBVA – Bank of Bilbao Vizcaya Argentina

BCB - Central Bank of Brazil

BIS – Bank of International Settlement

BNDES - Brazilian Development Bank

CAPA - Center for Aviation

CBIC – Chamber of Civil Construction Industry

CIA – Central Intelligence Agency

CNT - National Transport Confederation

DCA - Department of Civil Aviation

EIU - Economist Intelligence Unit

EPL – Logistics and Planning Company

EU - European Union

FDI - Foreign Direct Investment

FGTS - Guarantee Fund for Length of Service

GDP – Gross Domestic Product

GNI – Gross National Income

GNP – Gross National Product

GSP – Gross State Product

HDI - Human Development Index

HVAC – Heating, Ventilation and Air conditioning

IBGE – Brazilian Geographical and Statistics Institute

IBM - International Business Machines

IFC - International Finance Corporation

IIF - Institute of International Finance

INPI - National Institute for Intellectual Property

IPEA - Institute for Applied Economic Research
MCTI - Ministry of Science, Technology and Innovation
MEFP - Ministry of Economy and Finance
MERCOSUL - Common South Market
MNC - Multinational Company
MTE - Ministry of Labor
NAFTA - North American Free Trade Agreement
NZEB - Nearly Zero Energy Building
OECD - Organization for Economic Co-operation and Development
OPEC- Organization of Petroleum Exporting Countries
PAC – Growth Acceleration Program
PIL – Logistic Investment Program
PMCMV – My Home My Life Program
PPP – Private Public Partnership
R&D – Research and Development
RAIS – Annual Relation of Social Information
S&P – Standard and Poor
SBPE - Brazilian System for Savings and Loans
SELIC - Special System for Liquidation and Custody
SEP - Secretariat of Ports
SME - Small and Medium Sized Enterprise
UNDP - United Nations Development Program
UNESCO – United Nations Educational, Scientific and Cultural Organization
VAT – Value Added Tax
WB – World Bank
WDB – World Data Bank

INTRODUCTION

Innovation, technology and the decreasing of relative proximity drastically changed the way the enterprises compete in the 20th century. Globalization of the market, defined as an integration of worldwide economies, interconnectedness and interdependency between countries, is forcing the newcomers to think on global scale, tune the business strategies and continuously adapt the organization structure. Cross border transactions and asset exchange (capital, technology, products, knowhow and labor) are spreading worldwide. Firm dynamics, innovation and market orientation are keys for success and have a substantial impact on the company relative performance (Weitzel, 2005; Kirca, 2009), therefore a logical step to survive in the worldwide business is to expand to a global market and increase the international dimension, in other words, to internationalize.

International business or “*performance of trade and investment activities by firms across national borders*” (Cavusgil *et al.*, 2012) gained ultimately strong momentum and complexity. Few decades ago, internationalization was a domain of large companies and because of the existence of high entry barriers it was too difficult to operate on the international market. Nowadays the internationalization process got easier and therefore more and more small and medium sized enterprises, SME’s exploit the global market and constantly search for new opportunities abroad. The internationalization process influences almost all of firm value-adding activities. Global sourcing, manufacturing, marketing and sales represent a lot of challenges and risks. Successful internationalization is a source of various competitive advantages, such as scale and scope economies, increase of cultural awareness and proximity to the target customers, favorable negotiation power and reinforcement of a position on market compared to competition. On the other hand many challenges must be also taken into account, such as the need of appropriate firm organization, sunk cost, entry barriers, Cultural risk, Country risk, Currency risk and Commercial risk.

The main objective of this work is to provide in depth assessment of four internationalization risks of a Portuguese SME company which is competing in the field of renewable energy, more specifically on the energy transformation market niche and to gain valuable insights in terms of internationalization strategy and solid knowledge of target market. As the target market Brazil is chosen because of its cultural proximity, growing potential in the renewable energy industry, developing economic activity and attractiveness for the foreign direct investment. As the added value of this work can be considered the practical approach and variety of

quantitative and qualitative data that was obtained and used for the analysis both from the macroeconomic and microeconomic perspective. The study is divided into three chapters, the theoretical part, the case study and the conclusion.

The first chapter describes the four risks of internationalization, Cultural risk, Country risk, Currency risk and Commercial risk with the main objective to analyze its possible outcomes for the company and give an important knowledge to gain deeper insights in order to attenuate the negative impacts of management decisions during the internationalization process. Cultural risk is addressed by considering the personal culture, national dimension and corporate cultural dimensions and incorporates culture, language, religion and the dimensions of Geert Hofstede's research. Country risk is characterized mostly by the political and legal system. As for the Currency risk the hard currency and nominal and real exchange rates and their variation are taken into account. Commercial risk approaches the partner selection, the timing of entry and operational problems that can arise.

The second chapter, the case study is divided into four main sections. The first section informs about the up to date situation of the studied company, its vision, mission, services, human resources and business strategy. The second section describes the target market, its cultural aspects, infrastructures and key macroeconomic indicators together with sectorial analysis indicators important for the company and the internationalization risk assessment. The third section describes the three considered entering strategies, exportation, collaborative ventures and FDI in terms of the risks involved. At the end of this section, the entry strategy and the target region and state are chosen and the reasons for this choice are clarified. The last section of this chapter is creating the "bridge" between the theory of four internationalization risks of chapter one and the selected indicators, taking into consideration the present company market approach and the selected internationalization strategy. It explains the reasons why each indicator was selected and tries to clarify the connections of the results to four risks of internationalization and the current market approach of the studied company.

1. PRINCIPAL RISKS IN INTERNATIONAL BUSINESS

Internationalization is a continuous process with many challenges and risks that must be taken into consideration. There are four main risks which each company must manage in order to prosper in the international marketplace: Cross-cultural risk, Country risk, Currency risk and

Commercial risk as interpreted in the figure 1. The knowledge of these risks helps enterprises to prepare a solid strategy and to avoid financial losses and product-launch failures. All these risks are not completely transparent and are not easy to be foreseen but can be anticipated and managed to diminish their negative impact and consequences. In order to succeed in internationalization it is essential to be acquainted with these risks and to investigate them constantly.



Source: Own design

1.1 Culture and Cross-Cultural Risk

Cross-cultural risk is defined as a situation or event in which a cultural misunderstanding can put some human value in stake and arises from different languages, lifestyles, mindsets, customs and religion (Cavusgil *et al.*, 2012). The risk of misunderstanding or misinterpreting opinions or statements is relatively high when a lack of cultural information takes a place. The cross-cultural risk is highly probable to occur during business meeting, visits and international negotiation with future business partners. The impact of not knowing the cultural features, values and differences of target countries can be devastating and any professional manager must be highly aware of this. A company with weak international awareness can destroy its competitive advantages compared to a well-informed one.

The most sensitive areas of company's value chain to cultural differences are product development, promotion and advertising, selection of foreign distribution partners, communication with foreign partners, negotiation and interaction with clients.

1.1.1 Culture, cultural makeup and orientation

The word culture can be found in such disciplines as political science, sociology, management and anthropology. Culture can be considered as a learned, shared and enduring orientation of society expressed through values, ideas, attitudes, behaviors and symbols. Geert Hofstede (1983) in his research defined culture as “... *the collective programming of the mind that distinguishes the members of one group or category of people from others*”. The cultural characteristics are rooted in social and ethical standards which are passed from generation to generation. All these patterns influence the human daily routines, working style, living standards, preferences, tastes, desires and mind-sets.

Language, habits, customs and modes of thinking can vary significantly across different nations and societies. Each individual has its own form of expressing opinions, feelings and thoughts. The anthropologists divide dimensions of culture into three different groups: cultural make up that is visible, cultural make up we are aware of, and cultural makeup we are unaware of (Cavusgil *et al.*, 2012). The cultural makeup that is visible is widely known as high culture. Fine arts, drama, literature and classical music belong to this category. The cultural makeup that we are aware of is often called a folk culture and includes such dimensions as humor, religion, cooking, clothing and diet. The group of cultural makeup that we are unaware of named as deep culture comprises dimensions such as gender roles, greeting rituals, family relationships, conversational patterns, decision making patterns, nonverbal communication, beliefs what is right and wrong, attitudes to cooperation versus competition etc.

Personal culture and personal orientation is highly connected with the cross-cultural risk and it expresses the way we evaluate and arrive at conclusions of others from different cultural backgrounds. It is not just important for a single person but it has a deep influence on the way that multinational companies compete in the global market. Howard Perlmutter was a pioneer within theories concerning the internationalization process of MNC's. He distinguished three different orientations of doing business around the world, *Ethnocentric*, *Polycentric* and *Geocentric*. In his research he studied the impact of personal cultures on the success of MNC's in international business.

The company with managers who operate only home and are all the time isolated from the interaction with other cultures can have an *ethnocentric orientation* or “*home country orientation*” this means that the others, their opinions and values are evaluated by beliefs and opinions from home country based on home culture. This kind of personal culture is widely

spread in countries where one religion or political orientation is believed to be superior in some way (Cavusgil *et al.*, 2012). *Polycentric orientation* or “*host country orientation*” takes a place when a multinational company has its headquarters in another country and subsidiaries are managed in separate ways according to the host country cultural specifications. The probability of cultural adaptation and cultural risk avoidance increases with a number of interactions with different cultures and cultural environments, therefore the polycentric oriented managers are better suited for international business, though few cultural experiences are still limiting their success. *Geocentric orientation* or “*whole world orientation*” is usual for companies with many headquarters in various countries where many workers are from different countries and the information and decisions are taken globally. It can bring some economies and benefits, although it could be difficult for the company to maintain a uniformed corporate culture (Perlmutter, 1969).

It was confirmed that in geocentric oriented multinational companies the transfer of knowledge and cultural customs from one subsidiary to another bring a benefit to the organization as a whole, and by sharing the correct cultural information the company can have better potential to build competitive advantage (Georgeta, 2008). It was also shown that in a constantly changing global market, the geocentric approach and a global learning of the most innovative MNC headquarters gives them a strategic advantage compared to financial headquarters and ethnocentric headquarters (Weitzel, 2005). According to the author, financial headquarters coordinate their subsidiaries with an elevated financial freedom and give them autonomy to meet their budgets and to create local business strategies. Because of the freedom of subsidiaries, they operate on a local scale and their orientation is rather polycentric. Geocentric headquarters try to incorporate the local market differences into a solid business plan and share the information between headquarters and subsidiaries. Ethnocentric headquarters base all decisions on home market and have a very limited or no local responsiveness.

1.1.2 National cultural dimensions

One of the pioneers in defining the cultural dimensions was Geert Hofstede who in his cross-cultural research (1983) included a data sample of workers from over 67 countries, 38 occupations and 20 languages from the company called International Business Machines, known as IBM. In order to test the time stability of the answers he covered 2 points in time,

1968 and 1972. His work gained positive references among researchers and its validation was confirmed by finding more than 400 significant correlations with his cultural dimensions. He stated that “*The study of national cultures incorporates elements of collective behavior in nations that can be directly related to differences in context.*” Based on this idea four main cross-cultural dimensions were created: The power distance, Uncertainty avoidance, Individualism and Masculinity. Later on, two more dimensions were added: Long-Term vs. Short-Term Orientation and Indulgence versus Restraint.

Power distance can be defined both in the institutional and social context. It describes the inequalities in the power existing among people. The lower is the power distances the less inequalities are in the wealth and power distribution within societies. The highest scores of this dimension according to Hofstede classification were found in Latin countries and Latin European countries including France and Belgium, Mediterranean countries and South-East Asian countries. The lowest scores were found in Anglo, Nordic and German-speaking countries and in Israel. In an international company could sometimes be hard to capture and measure this cultural dimension, as its proxy can serve the hierarchical distribution. It was discovered that the position in a company hierarchical ladder depends on the age, experience or both. In Thailand and Japan, the determinant for a leading position is the age, and in Germany and the United States the leading managers are normally chosen according to their experience rather than the age which in this case is secondary (Beckman *et al.*, 2007).

Uncertainty avoidance describes in what measure people accept or avoid taking new approaches or trying something unexpected and can be also defined as a need of structure and formalization. In high uncertainty avoidance countries, the politicians and society promote specific policies to minimize a risk and to guaranty financial, political and social stability (Cavusgil *et al.*, 2012). In Hofstede classification high levels of uncertainty avoidance can be found in Belgium, France and Japan and low levels of uncertainty avoidance are in India, Ireland, Jamaica and the United States. The uncertainty avoidance is often compared to a risk aversion. The survey of economic students held in 45 countries concluded that risk aversion, loss aversion and probability weighting are strongly connected to the dimension of uncertainty avoidance (Rieger, 2011). On the other hand, Hofstede in his research clarifies that the risk aversion is not a correct proxy for the measurement of uncertainty avoidance, because this dimension indicates whether a new, surprising situation is comfortable or uncomfortable, not risky or non-risky.

Individualism can be broadly defined as a weak social connection on personal level and the need for independence. The contrast is called collectivism. Collective societies stand for the team work, human connection and collaboration spirit. The high score in Hofstede classification for this category obtained all wealthy countries with the United States, Australia, Britain and the Netherlands in the leading positions. In the middle are Japan and India and the lowest score got poor African countries, Latin America and Asia, here the society is more collectivistic. Individualism is also a convenient national cultural dimension to describe the herding behavior. Herding behavior means that some of the employee decisions can be based on a single decision or on decisions of the colleagues, following the herd. It was found that *“the more individualistic the culture of the country is the less likely is to show herding behavior”* (Beckman *et al.*, 2007). Other phenomena connected to individualism is the risk avoidance, the collectivistic nations show more tendency to risk-taking behavior (Rieger, 2011). This can be explained by the “cushion” hypothesis which explains that the collectivistic society provides a protective “cushion” and let the people feel more secure about their future and decisions, Therefore the individuals in these societies seek for more financial risks.

Masculinity is characterized by the need for achievement, assertiveness, hard work, self-confidence building, pro-activeness, leadership and wealth accumulation. Femininity is correlated to modesty, warm relationship, caring for the weak and nursing. Japan in on the top of the Hofstede classification with the highest score in masculinity. German-speaking countries and most Latin-speaking countries also obtained high score. Sweden, Norway, the Netherlands and Denmark are the most feminine countries and former Yugoslavia and Thailand also scores low on masculinity. In the study of 15 companies from five more common industries (Bostan *et al.*, 2010) was stated that in general, the masculine characteristics are more focused on leadership, strength, rationality and task orientation and are more supported by these organizations. The study also states that in the leading positions are increasingly more women employed, and for instance in France are the same amounts of feminine as masculine top managers. The women presence in the top of the company ladder was explained by the fact that in the modern world equality is promoted and that the sex is not directly connected with intelligence, training and motivation.

Long-term vs. Short-term Orientation basically describes the time horizon of planning and living. This cultural dimension is based on the study of Michael Harris Bond (1988), who collected the data in 23 countries around the world using a survey based on the Chinese scholar survey. The companies and people in long-term orientated countries normally focus on years

and decades and adapt their lives and objectives to achieve a long-term success. In the Hofstede classification the long-term orientation can be found in Asian societies, including China, Japan and Singapore. In these countries the education is based on the studies of the philosopher Confucius who promoted values as discipline, loyalty, hard work, education, group harmony, family, and auto control. On the contrary, the United States and Western countries are known for their short-term orientation. The short-term orientation is more focused on the protection of oneself, personal stability and reciprocating social obligation. In the study of 292 subjects of business school students in the United States (Nevins *et al.*, 2007) was discovered that the long-term orientation is also connected with ethics and conservatism. The conservatism is in the research defined as “*the attitude toward common goods*”. The conceptual model of the study connects two antecedents (conservatism and work ethic) with two aspects of the long-term orientation (tradition and planning) and the aspects of long-term orientation with personal ethical values. Work ethic was found to be positively related to tradition and planning, conservatism was related only to planning and the link between conservatism and tradition was shown to be insignificant. It was also proved that both aspects of the long-term orientation (tradition and planning) are related to personal ethical values. Another Hofstede’s cultural dimension is Indulgence versus Restraint which was also added more recently and is based on the Minkov’s cultural research (2011). According to Minkov indulgence societies have low limits and restriction and can freely fulfill their basic natural needs and desires, enjoy life and have fun. On the contrary, the restraint societies are known for a strong gratification control, strict social norms and reduced freedom of living and enjoyment. By Hofstede classification the Muslim world, Eastern Europe and Asia are known as restraint societies, Mediterranean Europe stands in the middle between indulgence and restraint. Almost all Sub-Saharan Africa, Western Europe and the United States follow the indulgence society rules.

Another national cultural dimensions that international companies must take into account are Language and Religion. By studying international languages managers increase their cultural awareness and get useful information about the values and habits of other nations. There are over 7000 active languages from which more than 2000 are in Africa and Asia and thus there are few native speakers of minority languages. According to Central Intelligence Agency, CIA the percentage of native speakers of most common languages is as follows: Mandarin Chinese 12.44%, Spanish 4.85%, English 4.83%, Arabic 3.25%, Hindi 2.68%, Bengali 2.66%, Portuguese 2.62%, Russian 2.12%, Japanese 1.8%, Standard German 1.33%, Javanese 1.25% (CIA World Factbook, 2012). Language can be expressed both verbally and non-verbally and

in some cultures the non-verbal part has a higher importance than the verbal, for instance in Japan, it can be highly disrespectful to show any signs of impatience during the negotiation process (Cavusgil *et al.*, 2012). Another challenge is represented by translating words and phrases from one language to another because some words or expression have their own cultural meaning and the word by word translation cannot express the main context and can cause misinterpretation leading to cultural conflicts.

Religion is defined as a system of a common belief and moral attitudes concerning the system of thoughts about what people consider being sacred, divine or the highest truth. Moral codes, traditions, values and institutions make also part of the religion and therefore the business and consumer behavior is strongly influenced by the religion. The most common religions are Christian 33.35% (of which Roman Catholic 16.83%, Protestant 6.08%, Orthodox 4.03%, Anglican 1.26%), Muslim 22.43%, Hindu 13.78%, Buddhist 7.13%, Sikh 0.36%, Jewish 0.21%, Baha'i 0.11%, other religions 11.17%, non-religious 9.42%, atheists 2.04% (CIA World Factbook, 2012).

1.1.3 Corporate cultural dimensions

In order to discover the explanation for the cross-cultural interaction in the workplace, cultural dimensions must be taken into account also according to the enterprise point of view. The enterprises standards, company mission, vision, company norms and values can be strongly influenced by personal culture, national culture and the character of the company owner. For instance if the chief executive officer is willing to take a risk, this can be reflected in risky marketing and publicity strategy or quick business moves and decisions (Cavusgil *et al.*, 2012).

Hofstede and the team of collaborators completed their IBM survey with 18 questions and a sample of quantitative and qualitative data from 20 organizations was collected. The research was held in two cities, Netherlands and Denmark. When analyzing the results, many differences were found in the perception of daily practices, but just slight difference in values. From the sample study arise six basic dimensions which describe the organization culture: Process-oriented versus results-oriented, Job-oriented versus employee-oriented, Professional versus parochial, Open systems versus closed systems, Tight versus loose control and Pragmatic versus normative.

In a process-orientated company the employees follow the strictly defined rules and procedures and any deviation from the routine is seen as a negative one. This orientation can be found in companies with high bureaucracy. On the other hand, the result-oriented company is only interested in final outcome and it gives a freedom to its workers when completing daily tasks. According to Peters (1982) “*the degree of homogeneity of a culture is a measure of its strength*”, which means that the strong cultures are more results-oriented because it is much comprehensible and transparent to describe the pretended result than to explain a long and complex process. The process orientation should be applied together with the behavior control in cases where a high programmability is expected, and the result orientation should be applied where the result is easily measured, but the process itself is not easy observable (Cools *et al.*, 2011).

Another dimension is the Job orientation versus employee orientation. Job orientation can be found within the group of managers who are assuming the responsibility of its employees work result without any personal attachments. Employee orientation is a feature of managers who tend to interest in employees familiar background, problems and well-being. The members of a company can identify themselves more with a profession they perform or with a company they work for. What distinguishes the orientation is usually the educational level. The higher is the education, the stronger is the connection with a profession (Hofstede, 2011).

The organization’s openness can vary significantly from enterprise to enterprise and can be related for example to the process of new workers recruitment, company communication with outside world etc. In a close system workers stay in a company for a long time and no information can be taken outside on the contrary to open systems where the company often admits new employees and there is no or slightly restricted information control. As shown in the study of Kasper (2005) who for his research choose multiple small scale qualitative data together with large-scale qualitative data from international companies, market oriented companies are usually open minded, accept new colleagues and try to incorporate them quickly.

Tight versus loose control is one of the dimensions which are more connected to the company business segment than to the company structure. In many companies within the same segment units to be more tight or loose were found. Tight control companies focus more on punctuality and time perception on the contrary to loose control enterprises where an employee has a higher level of freedom and does not have to follow the specified working procedures and stereotypes. The study by Cools (2011) relates this dimension with the Private Public Partnership in a long-

term infrastructure project and short-term urban regeneration project. It was confirmed that the loosely organized PPP was more convenient for the infrastructure project because the public party is able to specify the desired output requirement and to identify future problem and protect itself by detailed contract. The private party organizes the work and choose other business partners in order to finish in a specific time limit and inside a specific budget. The tight PPP showed to be better suited for urban regeneration project, because it is difficult to define the outcomes *a priori* and a constant and intense collaboration is needed.

The pragmatic versus normative dimension is defined by the degree of flexibility or rigidity within the company. Normally, companies that sell products to clients are more pragmatic compared to the legal bureaus where a law-based approach must be taken. It was also shown that pragmatic approach is more common in the market oriented enterprises, because for these enterprises, results competition awareness and the knowledge of customer needs are crucial for the success on the target market (Kasper H., 2005).

1.2 Country Risk

Country risk is widely known as an exposure to potential loss or adverse effects on company operations and profitability caused by developments in a country's political and/or legal environments (Cavusgil *et al.*, 2012). The political and legal environments are interconnected and constantly changing, if a political system changes, legal system changes as well and vice versa. Favorable legal climate and high political stability means lower country risk, and on the contrary, extensive regulatory burdens and political instability means a higher risk. The economical level is very important too, in poor countries the country risk tends to be higher as well. In the BBVA research (2012) the country risk is specified as "*a collection of risks associated with investing in a foreign country that includes several dimensions of vulnerability including economic, political, exchange rate, and transfer risk*". It can be derived from the definition that the country risk is also one of the most important variables for investors who work in international business. To be acquainted with a country risk diminishes the danger of failure and helps to better understand and select the host country business partner or a country for FDI. Country risk can also be taken as a mechanism which is adjusting the limits of activities of companies abroad. Therefore it works as a restriction for globalization (Iliescu *et al.*, 2010).

The participants that can influence the country risk by their decisions, restrictions and interests are the governments, international organization, regional economic blocks, and special interest groups such as labor unions, customers, competing firms, conservationists etc. The government operates on national scale, state scale and local scale. Regional economic blocs aim to advance the economic and political interests of their members, the most known are the European Union, EU, the North American Free Trade Agreement, NAFTA, the Association of Southeast Asian Nations, ASEAN and the Common South Market, MERCOSUL. Another group are forming special interest groups such as Organization for Economic Cooperation and Development, OECD or Organization of Petroleum Exporting Countries, OPEC.

1.2.1 Political system

As mentioned earlier, the knowledge of political environment is essential for the country risk evaluation. There are three main political systems, totalitarianism, socialism and democracy. Each political system tends to be associated to an economic model and determinates the country's economic freedom and openness. The main issues in adopted economic model are the level of market power and the resources ownership and distribution. It is crucial how resources are allocated among the agents operating on the market and who is in charge and deciding how the market operates (Abraha, 2004).

Totalitarianism is the first political regime which is specified by the total power and political control over the society. The cluster of totalitarianism is composed of various traits defined by Brzezinski (1956) which must be all present in the country scheme in order to be fully totalitarian country. These main traits are the presence of social ideology, mass party led by one man, terroristic police control system, monopolistic control of communication, monopolistic control about the armed combat forces and central control and direction of economy. The official ideology normally integrates superiority projected to perfect main kind. The society in totalitarian regime countries is 100% devoted to the country leader and unquestionably dedicated to his ideology. For a better control a secret police spread terror and exploit modern science and sociology. The radio, motion picture and the press are strongly censored and controlled in order to leave out any subtle messages against the regime. Associations, group activities and technology are centrally controlled and the monopolistic power is abusively applied for the whole economy (Silberstein, 2010).

Totalitarianism stands together with command economies which uses a model characterized by the full power and control of the government in guiding the state economy, resources distribution and the market operation coordination. This model failed to achieve sustainable economic growth together with prosperity and financial security of citizens. The state in this model has a full monopolistic power about many areas of the market, this means that it can use any pricing policy that it wants and maximize its revenues or simply use predatory pricing which is lowering the prices to the level that no company can compete in price, often with losses. It can apply also another abusive mechanism in order to destroy any other companies that try to enter the market. Many countries have left this economic model, although some countries still control various sectors of economy (Abraha, 2004).

In socialism, information is fully and easily controlled compared to a democratic regime and the state is using power, fear and public sanctions for this purpose. The strategy of socialistic countries is the focus on maximization of growth. The most important element common for all socialistic countries is the full ownership and management control of land, technology and factors of production such as capital and labor (Lerner, 1934; Lange, 1934). The party or government can reduce any time the price of the land in order to attract foreign investors who are willing to bring skills, technology or products to the market. The eviction of the citizens can occur when there is a need for a rebuilding the urban area or to build a new town on the rural land. The physical infrastructure is also owned by the state and it is often over-developed in order to incite foreign direct investments and to facilitate the trade. The technology is taken as a collective ownership and a part of socialistic system, so if acquired from abroad through joint venture, the state can apply the technology in every government company whenever needed. The main issue in this case is the legal property protection because in this manner, the primary technology owner is losing money invested in years of research and development. Reverse engineering is often used in order to discover the production processes and to copy the product and produce it locally. The allocation of goods and services can be controlled centrally, following the central planning economy model or left on companies using the market-based economy model, although the state has a global awareness of the market and revenues and is the owner of 100% of capital. Dual pricing can be implemented in order to give a higher freedom to some markets, in this case, a part of the production is handed over by the government controlled price and a part is sold at the market price. The ideology is spread to the smallest market niches. The decision making authority is always the government achieving it by naming the members of the party to the higher authority leading positions and securing

the overruling by the ideological ground. Every communist country establishes the terms and conditions of work by controlling the labor unions and decides the working hours and minimal wedges. All these characteristics leave a lot of space to corruption and unethical tactics (Virmani, 2005).

Socialism uses the mixed economy model which is based on the Keynes (1936) who claimed that the market by itself cannot work as efficiently as it should, and there are some sectors which need the government interventions. This is the main idea for the mixed economy model where some sectors operate better without the government intervention and some with the government intervention. A border which separates the government and the business community extent for the resource allocation and the market activities operation must be clearly defined for a successful run of this model and for the society wellbeing and the economy development (Abraha, 2004).

Democracy is characterized by private property rights and limited government intervention, in other words, the state has a low control of public assets, and there is total freedom in the market. Democracy causes openness, more firms in market, and theoretically higher benefits for clients as the prices should be lower because of the competition. Democracy compared to the dictatorship is more favorable for diversity and it brings more independent thinkers to the market. The main focus of democratic countries is to maximize welfare of the agents which can sometimes lead to individualistic behavior (Virmani, 2005). Rueschemeyer (1992) in his research pointed out that the better the country performs economically, the higher is the possibility for democracy to survive. Therefore there is a strict connection between democracy and the economic growth.

Democracy applies the market economy model often described in the literature by using the Adam Smith's invisible hand of market, which is the metaphor for the natural force that guides a market to competition for scarce resources. The market is decentralized, dynamic, applicable and adaptable. Acemoglu *et al.*, in his research (2007) discovered that the market orientated model works more effectively in anonymous markets where individuals have a lower aversion to risks because the lower risk aversion makes the allocation of resources less costly. The allocation and resource management are coordinated through various actors on the market which are free to operate and the prices are determined by supply, demand and by the decisions of firms in the competitive market. Under certain conditions, the optimal allocation of assets

can be achieved (Abraha, 2004). The state has a regulatory power and should be able to ensure smooth market running according to the ethical standards without abusive tactics.

1.2.2 Legal system

The knowledge of home country and host country legal environment plays a highly important role in diminishing the country risk. The most common legal systems represent common law, civil law, religious law and mixed law legal systems. The common law is based on tradition and new cases are judged according to previous ones. The civil law contains clearly stated legal rules which are accessible to wide public. The main categories of this legal system are commercial, civil and criminal. Religious law rules are dictated by some religious beliefs and standards. Mixed systems uses as a spring board two or more legal systems which operate together. There could be significant gaps between the commercial and the private law which could make the collaboration transparency, the international transaction and the contractual protection difficult. In less capital-intensive industries, such as services, intangible assets are more important than tangible ones, and the quality of legal system has a deeper impact on the industry as whole. Theoretically, the qualitative improvement of the legal system has a positive impact on the efficiency of economy (Cavusgil *et al.*, 2012).

The quality of the legal system is also connected to idiosyncratic risk, which defines the risk connected to the possibility of an event affecting a specific asset, but not the market as a whole. Leaven *et al.* (2004) in his research studied the impact of the quality of the legal system on the firm size. Firstly, he concluded that by improving the legal system, the large companies grow even more and the small ones tend to leave the market, therefore the average size of companies increases and countries with a better legal system have more larger firms on the market. He also discovered that the quality of the legal system had a more significant impact on the firms which are entering via FDI and that companies in more favorable legal environment tend to invest more into corporate assets and development and the demand of investment capital increases too. Another interesting point is that by the reduction of idiosyncratic risk the capital is more efficiently distributed among entrepreneurs and that the better legal system quality has an important impact on the production efficiency because the amount of trading partners is increasing, and therefore the talented entrepreneurs can produce more output by less input and hire less workers outside their social cycles. Production efficiency is pro-cyclic variable

following the economic cycle so when it increases the economy tends to be in the phase of the economic growth (Abel, 2008).

Another research is focused on connecting the quality of the legal system with the economic performance as a whole. In his paper Horst Feldmann (2009) used panel data from over 75 industrial, developing and transition countries to assess the impact of legal system quality on the main macroeconomic indicators. He concluded that “*a legal system characterized by a dependent judiciary, biased courts, a lack of intellectual property protection and a lack of integrity increases unemployment and lowers the economic level*”. On the contrary, the legal system which is characterized by juridical independence, impartial courts and the high intellectual property protection does not favor any group of interests and represents no restriction for a business to flourish. Correctly working legal system and the more flexible regulation also decrease the costs of social conflicts and have a positive impact on innovation and the resource distribution within the society. All this increases the effectiveness of productive economic activities and leads to the economic progress. The research further confirmed that under the correct rule of law, the enterprises have a higher incentive to hire new employees and the employees have a better security on the work place because any legal dispute can be solved effectively with a low cost. As entrepreneurs are more driven to innovate and invest and the employees tend to work more efficiently, the employment rate and the gross domestic product growth rate are higher and the unemployment rate is lower.

The host country legal environment can also impose restrictions on FDI, can restrict the amounts of the transfers to headquarters from subsidiaries, set costly standards via the environmental law and controls the operating forms and practices. Other difficulties could arise from the insufficient protection of intellectual property and low regulation of e-commerce (Cavusgil *et al.*, 2012). For facilitating and protecting the companies, the Convention on Contracts for International Sale of Goods (United Nations, 2010) unifies the text of the laws for international sales contracts applicable for domestic law. Other useful pieces of information can be found in the Foreign Corrupt Practices Act (U.S. Department of Justice, 2012) which stands against bribes to foreign country leaders and politics.

1.2.3 Government and its interventions

Government has the access to the information about individuals of the state and also to the feedbacks of the local market and industries. Therefore, one of the theories is that it can achieve a better risk sharing and consumption smoothing via its interventions. The main challenge which comes into place is the conflict of interests. Some of the elected politicians have a tendency to maximize their rents and act according to their own benefits which can lead to worsen the government-operated allocation mechanism and can be potentially worse than the market-operated allocation. Oscar Lange (1934) argued that while the government respects the incentives from individuals, the government-operated mechanism lead to better improvement in the allocation of resources compared to the market-operated mechanism. The Lange argument should be valued by the present trends and it is questionable in the contemporary economic environment because of high control and communication cost of such a scheme and because the allocation rules are impossible to be followed by all individuals. Because of the government and politics own interests there is a need for financial incentives and other benefits for them to follow the most sustainable mechanism. Therefore it is crucial for the economy of the country to provide sufficient rents for the politics because in this case they seldom deviate and expropriate a fraction of the total output of economy (Acemoglu *et al.*, 2007). Another important conclusion about the government was found by Zhu (2007) who revealed that government enterprises are contributing to create more equal society and to diminish the income inequalities. It was shown as well that these enterprises as a sector have positive annual results and do not represent a burden for the country budget. All these facts confirm another research of the same author (2006) which concluded that the public enterprises are an important agent for the economic and investment growth.

There are many important government interventions which have a crucial impact on the country risk, on the attractiveness for foreign direct investment, on the economic development and financial well-being of the country's citizens. Foreign government can restrict the access to the markets, impose bureaucratic procedures on business transactions and limit the financial amount that the company can bring home from foreign operations. It determines indirectly the prices of gasoline, agricultural products, electricity and gas by the level of applied taxes. The government can take over the corporate assets or apply embargos and sanctions to a specific company. Embargo is an official ban on exports to a particular country or import from a particular country. Sanctions are types of trade penalties imposed by one country (or countries) to another, such as tariffs, import duties and others (Cavusgil *et al.*, 2012). Other government

interventions are the institutional, administrative and political reforms which go hand in hand with economic reforms and economic development. The most important reforms are those which help to fight corruption such as the improvement of the function and transparency of institutions and the legal reforms (Dandashly, 2012). As stated by Missiroli (2012), other important policies to improve the efficiency, effectiveness and productivity of the country economy are improving the rule of law, improving the security of sectors and founding independent civil society such as non-governmental organizations or labor unions that create pressure on democratization and have a positive effect on equilibrating the regime. The monetary policy is another strategy for the government to intervene. Blanchard (2004) suggested that the effectiveness and the impact of the monetary policy are not always constant in time. According to his research, the most important determinant of the monetary policy success or failure is the credibility which depends on the agent's perception of the probability of the debt default. Andrade and Teles (2008) found out and confirmed by micro econometric research of the time series of six emerging economies, Argentina, Mexico, Korea, Russia, Thailand and Indonesia that the monetary policy is an important tool to manage the country risk, but it is completely ineffective during the periods of crises. They also studied the impact of three macroeconomic variables on the country risk, the interest rates, rates of return on international assets and the state reserves. By using the time varying parameter model they proved that in some countries the increase of interest rate tends to reduce the country risk instead of increasing it, which underlined the Blanchard theory of credibility. In another research (2007) which tested the relationship between rates of return and exchange rates for emerging economies the same authors concluded that outside the crisis, the increase of international rate of returns will increase the country risk because the domestic returns will decrease and that the opposite is true during the periods of crisis. They also showed that a drop in reserves increases the probability of exchange rate depreciation, affecting the financial market and consequently raising the risk.

1.2.4 Country risk assessment

There are many international rating agencies, such as Standard & Poor, S&O or Capital IQ or political services groups that help to determine the level of Country risk, assess political, legal, financial and economic aspects and periodically release their ratings and indexes. The great challenge that stands up is the widely known problem of asymmetrical information and

the individual rationality coupled with it, as stated in the classic example from George Akerlof (1970). The author concluded that with an asymmetric information and no or limited knowledge, the quality is hard to determine and therefore to interpret correctly the data obtained from the country risk ratings further knowledge of assessing methodology must be gained and the data mustn't be taken as the only source of information. The rating result can also indirectly decide economical destiny and the development of country economy because it strongly affects the confidence of foreign investors where poorly rated country can be less attractive to invest and vice versa. This leads to the existence of strong interconnectedness between the country risk and globalization. Another aspect is the fact that the assessment of the rating agencies for the country risk respond to changes within economic environment with delay and the agencies were not able to foresee the economic crisis in various countries, giving them high ratings (Iliescu *et al.*, 2010). The majority of rating agencies also do not take any responsibility for the information published and were publically criticized. Thus they are an important source of information and represent important players on the field of international business.

The most important issues of the Country risk are corruption, legal property protection, crime level, business norms, national security, government interventions, censure, trade barriers and protectionism. Protectionism is in broader sense a restrictive economic policy for the trade among the states by applying import tariffs, quotas or regulations with a propose of cutting the imports and promote home produced goods and services. Wars and natural disasters must not be omitted from the country risk because if they occur, they lower the income where the negative impact is stronger on the rich population than on the poor (Zhu, 2007). Another variable, which is often being considered as the representing variable of the Country risk, is a sovereign risk which by its definition evaluates the danger of a country to default on its commercial debt and obligation (Heinrichs *et al.*, 2012). According to the authors the sovereignty is not a correct proxy for a Country risk, because if a country has a low sovereignty risk, it does not automatically mean that the Country risk is low because the criminality and corruption can be very high, besides countries with a low country risk may not be able to pay its debts. Those two risks should be distinguished and sovereign risk should be evaluated separately but both are vital to be known for the future investors and international managers.

For the assessment of the Country risk the Euromoney index and International Country Risk Guide serve as a good source of useful information containing wide variety of variables and considering the opinions of different experts in this field. On the other hand they were not able to foresee the coming financial crisis and are not conclusive predictors for this purpose

(Albizuri *et al.*, 2012). Both guides together contain indicators to assess the political, economic, financial and structure risks where for better understanding, some economical definitions should be clarified. For this purpose the Macroeconomics book of Abel *et al.*, (2008) is used.

The political risk qualitative and quantitative sub-categories are corruption (impact on country risk, threat to foreign investment), government payment fails (government policies to financial transfers), government stability (government unity, legislative strength, popular support), information transparency (accessibility and reliability of presented information), institutional risk (efficiency of state institution), regulatory and policy environment (its quality and implementation), the socioeconomic conditions (poverty, unemployment, etc.), investment profile (contractual viability, delays in payment, profit repartition), internal conflict (political violence, terrorism, civil war, etc.), external conflict (war, foreign pressure, etc.), military in politics (threat causing increasing defense budget, confidence loss and diminution of democratic accountability), religious tensions (risk in applying inappropriate policies, this component is predominant in governance by single religion), law and order (assessment of straight and imparity of legal system), ethnic tensions (racism, nationalism and social division), democratic accountability (the level responsiveness of the government to the people) and bureaucracy quality (institutional strength, autonomy of bureaucracy from political pressure, etc.).

For a qualitative and quantitative assessment of the economic risk following indicators are of high importance GNP outlook (the prospects of economic growth), Unemployment rate (the amount of individuals willing to work without job in the moment), government finances (represent the fiscal strength), monetary policy stability (measurement of the currency risk), GPD (the sum of added value of a country within the specific period of time per number of country members), GDP per head, real GPD growth (the percentage growth of GPD each year), Inflation rate (the value of variation of the middle price levels) and Current account balance (the balance of economic transactions between the country and outside world, for example, import minus export plus money transfers and FDI balance). Another category of economic risk is the financial risk which is defined as an ability of the country to pay its official, trade and commercial debt obligations. Two main indicators are to be considered in this category, public debt as a percentage of GDP (estimated external depth converted to US dollars applying the year current exchange ration expressed in % of GDP) and exchange rate stability (appreciation or depreciation of currency to the dollar).

In the structure risk qualitative and quantitative assessment demographics are present (the economic growth and political stability measured as a function of demography), soft and hard infrastructure (cultural and social institution and country physical infrastructure adequacy), labor market and industrial relations (political stability, suitability of labor market for the economic growth).

1.3 Currency risk

Currency risk means a potential harm that arises from changes in the price of one currency relative to another (Cavusgil *et al.*, 2012). The change in the currency value can represent substantial gains or losses because when a product is sold in one currency which price increases in comparison to domestic currency, the selling company can lose a considerable amount of money during the transaction. In the global world market there are around 150 currencies. The currencies are divided into convertible and non-convertible. The convertible currencies also called as hard currencies are characterized by their stability and are universally accepted for international transactions (Euro, Dollar). The non-convertible currencies are not accepted in international market.

1.3.1 Hard currencies

Goldafajn *et al.*, in his research (2000) defines a hard currency in different contexts. The first definition context is a willingness to hold the currency and can be measured by cross border financial transactional use. This definition can be quite restrictive, because in this category fit many international currencies. Another definition is based on its application and in a broader sense can be understood as a willingness to apply the currency in a long-term contract, such as construction contracts which are correlated with the country financial development. The last definition is related to the perceived sovereignty risk of a domestic and foreign currency sovereign debt using information of the Bank of International Settlements, BIS. By analyzing 162 countries during a nine years' period, the authors founded that the hardness of currency is highly correlated to financial development, but owning hard currency doesn't fully predict the economic health. The true is that the possession of hard currency establishes a stable macroeconomic development by lowering inflation and real interest rates. It is also true that

the macroeconomic stability leads to the financial stability, though there are other macroeconomic variables to be taken into account.

1.3.2 Nominal and real exchange rate

There are two kinds of exchange rates, the nominal exchange rate and the real exchange rate where the calculation of each rate is demonstrated in the equation 1 and 2. The nominal exchange rate (e) reflects the purchasing prices of home and foreign currency and is defined as the amount of units of domestic currency (P_{pd}) that can provide one unit of foreign currency (P_{pf}). The real exchange rate (RER) from the definition based on purchasing power parity reflects how much more or less goods or basket of goods can be purchased home or abroad and is based on home and foreign prices or consumer price indexes. The rule of purchasing power parity determines that the purchasing power of a currency for a defined representative good or basket of goods should be the same in every country thus the value of real exchange rate should equal to one (Branson, 1981). The real exchange rate according to the purchased parity rule is defined as the ratio of domestic prices (P_d) to foreign prices (P_f) converted by nominal exchange rate to domestic prices ($e * P_f$) (Naknoi, 2008). It is important to clarify that both nominal and real exchange rates can be defined also relative to foreign currency switching the numerator and denominator in the fractions of equation 1 and 2.

$$\text{Nominal exchange rate: } e = \frac{P_{pd}}{P_{pf}} \quad (1)$$

$$\text{Real exchange rate: } RER = \frac{P_d}{e * P_f} \quad (2)$$

1.3.3 Appreciation and depreciation of nominal exchange rate

Considering the definition of equation 1 in the case of nominal appreciation of home currency means that the price of foreign currency gets cheaper in domestic currency. The decline in the value of the nominal exchange rate is defined as real appreciation of currency and the increase is widely known as nominal depreciation of currency (Kipici, 1997). The nominal exchange rate serves for the adjustment of the real exchange rate and also for the conversion of currencies in international business transactions therefore its fluctuation can represent losses and gains for globally competing enterprises. For instance when the nominal exchange rate depreciates the

domestic currency is losing its value in comparison to foreign currency because more units of domestic currency are needed to purchase one unit of foreign currency. For example if the foreign company sells one unit for 2 R\$ in host country and the nominal exchange rate of R\$ to \$ is 2 it is getting 1\$ for each unit. If the nominal exchange rate depreciates to the value of 3 and the company is continuing selling one unit for 2 R\$ it is getting only 0.67 \$ therefore losing money.

1.3.4 Appreciation and depreciation of real exchange rate

The depreciation of the real exchange rate when considering the definition in equation 2 is associated with public and private inflows because when the real exchange rate depreciates under certain value the production and material costs are lower in the home country in comparison to the host country which attracts FDI. Combes *et al.* (2011), found that the appreciation effect is strongest in portfolio investment and is almost seven times higher than the effect of FDI and bank loans, on the other hand, private transfers has a lower impact on exchange rate. The author also stated that significant increases in capital flows can represent a danger for the vulnerability of the financial system and can overheat economy because the inflow of capital is often connected to the lending boom which causes a higher gap between the bank liabilities and assets or between the borrowed and lent currency which can lead to asset price bubbles and fragility of the banking system. Another negative consequence of capital inflows and the appreciation of the real exchange rate is the loss of competitiveness that can cause macroeconomic instability and lowering the exportations. The benefits of capital inflows tend to have a long-term character and include for example increase of efficiency of investment, technology transfer and economic growth (Lartey, 2008). Lee *et al.*, in his research (2008) studied the relationship between real exchange rate and a set of economic fundamentals on a sample of 48 industrial countries and emerging markets. His conclusions pointed out that the appreciation of real exchange rates is correlated with an increase in the commodity terms, an increase in government consumption, the elimination of administered prices and the depreciation of real exchange rate is correlated with the move to a liberalized regime.

The exchange rate depreciation induces repercussions on microeconomic variables. The research by Syed *et al.*, (2010) used widely known microeconomic models extended with the impact of future expectations of the market agents studying the effect of the exchange rate depreciation on output, prices and balance of trade. The authors found out that on the demand

side the exchange rate depreciation affects positively the outside competitiveness and increases the net exports, on the other hand, the depreciation can increase interest rates and affect negatively the home investment and consumption. As for the supply side, they assumed that the companies adjust their prices according to the exchange rate and the price of foreign goods. The effect of the depreciation on output, prices and balance of trade was studied according to three considered expectations, adaptive, extrapolative and regressive. The three types of expectations were defined by Marey (2004) who studied the forecast of the exchange rate using as a base the survey data in a longer horizon for artificial economy of traders. According to the author, in all cases, the traders for a forecast of the future exchange rate use the present values of exchange rate where the difference is in the second considered variable. In the case of the adaptive expectations it is considered the entire history of the past expectations of exchange rates values, in the case of extrapolative expectations it is considered the history of the past values of exchange rates, and in the case of the regressive expectation the present value of the equilibrium exchange rate is taken into account. From the results of Syed's research can be concluded that in a long run the output decreases for regressive and extrapolative expectations and increases for adaptive expectations. The Balance of trade increases in the case of extrapolative and regressive expectations, and decreases in the case of adaptive expectations. The prices increase in all cases of the expectations.

1.3.5 Real exchange rate assessment and determinants

There are many methods and policies for the real exchange rate assessment. In the methodology for real exchange rate assessment of international monetary fund (Lee *et al.*, 2006) three revised and extended methodologies are proposed in order to complement the existing assessment methods. The first is the macroeconomic balance approach, the second is the equilibrium real exchange rate approach and the third is the external sustainability approach. The balance approach is based on the current medium-term account balance at prevailing real exchange rates and estimated equilibrium Current account balance. The applied real exchange rate adjustment is the adjustment needed for the elimination of the gap between these two balances. The equilibrium real exchange estimates the equilibrium real exchange rate based on fundamental economic variables such as net foreign asset, relative productivity, the terms of trade and the differential between tradable and non-tradable sector. The real exchange rate adjustment is a difference between current and estimated equilibrium real exchange rate.

The external sustainability approach basically adjusts the real exchange rate in order to stabilize the net foreign assets level on the assumption of the medium-term economy growth rate.

From the balance approach can be derived that the current account balance and its variations have an important impact on the determination of the real exchange rate. As founded by Branson (1981), the Current account surplus is associated with the real appreciation of the currency and the current account deficit with the real depreciation of the currency. There are many economics and other determinants of the Current account balance, the principal are the fiscal balance, demographic transition, net foreign assets and economic growth. Fiscal balance has a significant impact on the real exchange rate. The fiscal balance can be raised by cutting the government spending, increasing the taxes and reducing the amount of imported foreign oil (Chinn, 2005). Consequently, the revenues and the national savings will increase the Current account balance and cause the real appreciation. Net foreign assets are other determinants in a long run of the Current account balance. Lane in his research (2004) stated that as a reaction to the transfer to foreign country, the demand for a home goods falls followed by the drop in their relative prices and reduction of domestic wealth and the expansion of home export sector. The author's empirical research concluded that there is a long-run correlation between changes in net foreign assets and the real exchange rate, both for industrial and developing countries and that the countries with high net foreign assets can maintain more appreciated real exchange rates and still remain solvent. Another variable interconnected with the real exchange rate variation is the economic growth. As found in the research of Rodik (2008) the undervaluation of currency stimulates economic growth and vice versa, this is especially true in the case of developing economies. On the other hand, overvalued exchange rates are the incentives for a corruption and rent-seeking and inconstant economic cycles which negatively influence the economic growth. The working paper also concludes that the depreciated real exchange rate forces the profits of investments in tradable goods and promotes the economic growth by speeding up the structural changes.

1.4 Commercial risk

In strongly competitive market, many decisions are based on incomplete information and the executive board must often face various risks and take daily many uncertain steps to sustain the company's market position. In the global competition for an international company, the impact of its decisions is often multiplied and can signify higher profits or

losses compare to the case of competition on domestic market. Commercial risk is by its definition the risk of loss or failure caused by weak application of business strategy, tactics and procedures and can arise as a result of the selection of weak partner, bad timing of the entry to a target market, operational problems, strong competition intensity or poor operation and marketing strategy (Cavusgil *et al.*, 2012).

1.4.1 Partner selection

The partner selection determine future success of both companies that are entering the alliance, weak partner selection can have as an consequence high opportunity cost or in some cases even economic losses. The classical approach of resource-based alliance theory points out that the company can achieve and maintain competitive advantage by having exclusive access to scarce and imperfectly mobile resources such as factors of production, patents, brand reputation, installed base and human assets. Imperfectly mobile status means that the resources cannot be transferred or sold by itself in other words the resources are fully controlled by the owner (Besamko *et al.*, 2009). This approach is contested by the research of Overby (2005) who argued that the resources shouldn't be taken into account as the only determinant of the alliance selection criteria but should be considered together with the aligned aspirations of the candidate company for business partnership. In the author point of view, in the exploratory stage, the aligned aspirations are more important than the resources, in the development stage the aligned aspirations are equally important as the resources and in the maturity stage the resources are more important than the aligned aspirations. Other important factors for a successful and healthy alliance are the existence of legal agreement, formal process for a partner selection, good financial health of the target partner, the definition of clear objectives and responsibilities for all the members of alliance and good strategic fit. The most commons reasons for alliance failure are the mismatch with the partner strategy, inability of the partner to deliver expected competences, lack of trust, cultural gap and operational problems (Twardy, 2008).

1.4.2 Operational problems

The internationalization is a complex process and many operational issues stand up along the way to the conquest of international market. The effective resource management and

operational efficiency is a vital factor for company's sustainability, especially in the beginning of the internationalization process due to the fact that the resources are scarce. The main complexity and operational problems are represented by the way how the supply chain is operated where the most important activities are sourcing, production, sales and marketing and services. The quick and effective sharing of knowledge, quick product distribution, maintaining high levels of production efficiency and quality of customer service and ecological and sustainability awareness issues lead to the creation of complex supply chain management strategies (Salimath, 2010). According to the survey about the operation and supply chain management done by Paulonis (2008) the asked companies paid special attention on the factors closely related to the choice of products and services, energy prices, financial volatility, the adaptation of data-driven technology such as localization tracking technology, regulatory requirements within the countries, the infrastructural quality and geopolitical stability. The main finding of the research is that in the beginning the supply chain is normally managed as a whole by the company in order to cut operational cost and in more developed phase the supply chain activities are normally completely outsourced. Other important conclusion is that most of the companies use as a best way to increase speed to customers, improve service and to cut down the operational cost the management of supply chain both by sourcing and logistic outside the home country because the focus toward centralization of supply chain brings scale economies and healthy and more effective synergies with global supply firms.

1.4.3 Timing of entry

The timing of launching new products and technologies or entering to new market is one of the most important strategic decisions for a company. Main question is whether to be the first to bring a specific product or service to the market or whether to wait until the market is "opened" and reacts with a proper feedback and enter only then as a competitor of an existing company or companies. With this in mind, three categories of companies were specified. The first category is called pioneers, the second early followers and the third late followers. Early followers and late followers enter to the market where already operates one or more companies with the difference that early follower enter quicker than late followers. Pioneer companies, designated also as first movers are always the first on the market facing all risks and consequences that this decision brings. Launching new product to the market is known as

product pioneering, using a new process is called technological pioneering and entering to new market is designated as market pioneering (Dorde, 2008). The main advantages of pioneering companies are that pioneers can achieve positive and long lasting reputation, reduce total costs via the control of new technology and supply distribution channels, create base of loyal customers, difficult imitation of its products and services, close the market for competitors creating entry barriers, control better the product price by achieving total market share and monopolistic position and cause high switching costs for a client (Thompson, 2003). Switching costs represent the costs of passing from one product long time used by customer to another of the competence (Besamko, 2009). According to Thompson, the pioneering process can be described by three periods, the buildup period that is characterizes by weak demand and the need for investment and gaining of reputation, benefit period with higher demand and stable competitive advantages and erosion period where new entrants create competition and the market share shrinks. The duration of benefit period and having a competitive advantage depends on various factors. Kerin in his research (1992) defined five more important categories for maintaining the competitive advantage, taking high benefit of innovation and imitation cost difference, exploring innovation costs, learning from its own mistakes, achieving and exploration of scale economies and changing the consumer preferences toward its own products. The main risk for pioneering companies is connected to free-riding, the phenomena where the pioneer invest in publicity and marketing and product development and other companies enter with a close substitute product decreasing their sunk costs and “stealing” market share of the first mover. Other risk represents the evolution of customer needs, technological advancements and market uncertainties (Lieberman, 1988). According to Sungwook (2006), when the market is started by introduction of new product, the market pioneering companies have normally higher probability to fall compared to the market that is started by innovation of existing products. In this case the first movers fall seldom and it is easier to sustain competitive advantage.

2. CASE STUDY

2.1 Company Qzero

QZ – Quase Zero Ltd. operates on the market under the label Qzero Energy Building in the sector of Heating, Ventilation and Air Conditioning, HVAC. Its system solution architecture can be integrated from small to large households and industrial buildings. The company was founded in the beginning of 2012 and its labor work and engineering team owns a specific know-how and practical experience gained during eight years of activity in the area of geothermal heating and air conditioning systems and systems based on heat pump technology. Together with exclusive suppliers and business partners the company offers a market adopted solutions distinguished by high quality, versatility and high energy efficiency.

2.1.1 Drivers

The main driver is the concept of Nearly Zero Energy Building, NZEB. This concept is based on the legislative directive 2010/31/EU which sets challenging goals for the EU members. According to this approved directive, the future buildings must achieve nearly zero energy consumption balance, this means that besides the improvement in applied construction materials and thermal insulation, the future buildings must integrate the most efficient HVAC systems in order to comply with the legislation. For this purpose Qzero integrated into its offer not just the high efficient HVAC equipment, but also the passive heating/cooling technology and new innovative components such us ventilated floor heating unit and passive ventilation canal.

2.1.2 Value proposal

The core business is centralized around a Qzero energy system which integrates in the standard solution following components: Ventilated floor heating units, Heat pump, Ventilation unit with heat recovery, Geothermal ventilation canal and the integrated control unit. All components and equipment are also offered separately according to client needs and specifications. In order to add a value to services, technical consultancy is provided by their engineers and exclusive suppliers. The offered HVAC solutions are focused on various areas

such as the construction of new households or industrial buildings, the urban rehabilitation and the substitution of old low efficient system for energy production such as boilers or other units. Qzero Energy Building offers all services from the HVAC area, since the engineering project conception including calculations, drawing and technical specification until the project implementation and warranties.

2.1.3 Mission

The mission is to maintain proactive and innovative attitude with a strong orientation on quality and client needs offering up to date renewable energy transformation systems and continuously integrating into the portfolio new more sophisticated and environment friendly solutions.

2.1.4 Vision

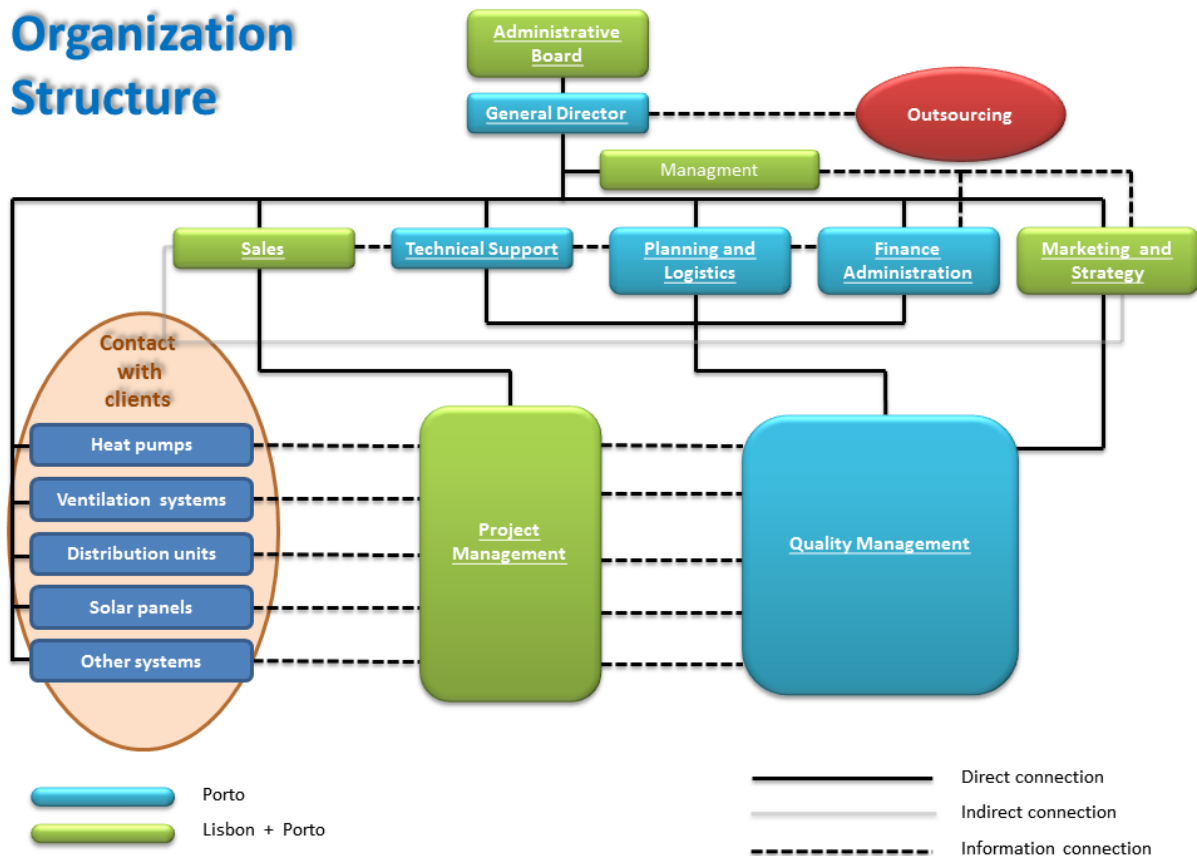
The vision is to be the leader in the HVAC sector by focusing on the highest efficiency solutions via optimized combination of the most advanced technological means, passive cooling systems and removable energy resources achieving the total energy balance close to zero.

2.1.5 Company structure

As indicated in the figure 2, for a company organization is used the matrix structure model which is more appropriate for the cases when there is considerable quantity of different products to be offered and possible new products to be acquired, in other words the main focus is on products. There are six main departments in the organization chart, administration, finance administration, sales department, technical support department and the planning and logistics where some responsibilities are in the common interest and overlap themselves. These departments constitute the core of the company organization. Sales department is focused mainly on acquiring new clients and the overall project management with the main objective to correctly organize and manage the whole service since the project documentation preparation until the correct and successful execution of installation and after-sale services. The technical support prepares together with sales department the budget and technical

documentation and is always available for clarification of any technical question directly or indirectly by communication with the suppliers, clients and outsourced service partners. Planning and logistics department is responsible for correct material management and scheduling of the orders, it communicates both with sales and technical support department. Finance administration department is responsible for the overall control of accounting of the company and costs control management. Administration board is responsible for the main marketing strategy, finding new market opportunities and for overall company organization. The administration board is composed of three members, the general director, the finance administrator and the sales director. It is also important to state that the company has almost all departments situated in Porto because there is higher possibility to obtain supportive programs than in Lisbon.

Figure 2. Organization chart



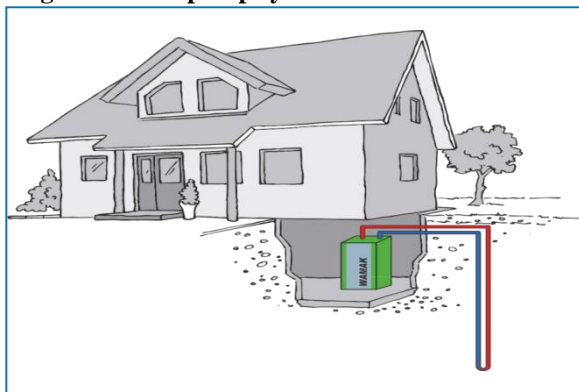
Source: Own design

2.1.6 Products

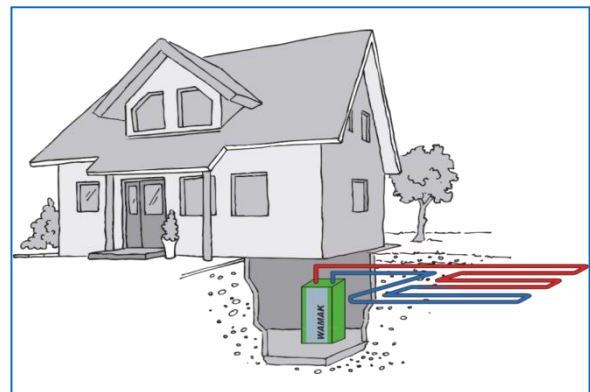
2.1.6.1 Heat pumps

A heat pump is an equipment that uses renewable energy for heating, cooling and hot water production or for other processes. The heating and cooling capacities cover both small and medium building such as houses or flats and large scale projects such as office, industrial and service buildings. There are four heat pumps systems in the portfolio as indicated in the figure 3, the water-water system, the system with vertical tubes, the system with horizontal piping and the air-water system. Each system is suitable for different conditions and differs in efficiency and payback time period. Each heat pump incorporates the components of the highest quality where the heart is the compressor, the body parts are head exchangers of high efficiency and the protection against peak current and electrical network instabilities and the brain is the control which offers local and remote control and maintenance.

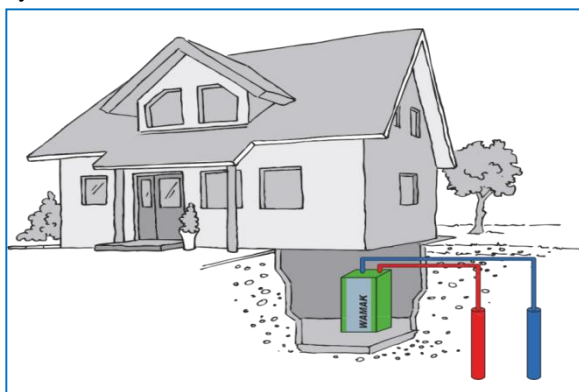
Figure 3. Heat pump systems



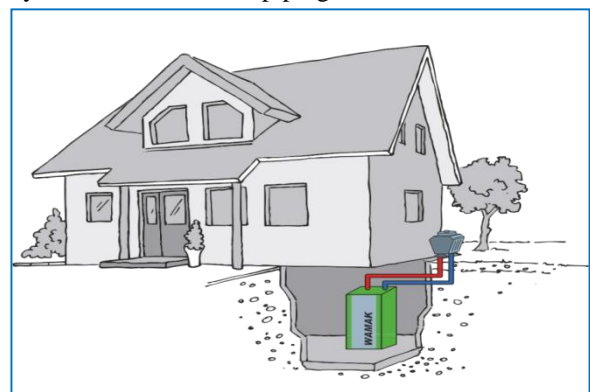
System with vertical tubes



System with horizontal piping



Water-water system



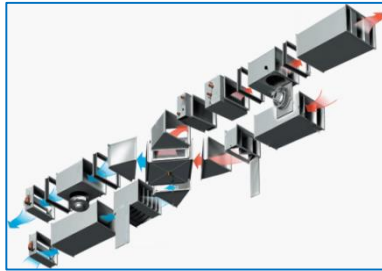
Air-water system

Source: Qzero Energy Building

2.1.6.2 Ventilation systems

The ventilation systems serve for the introduction of clean filtered air into the space or for other purposes such as heating, air-conditioning or humidity control. In the large scale or service building, the fresh air necessities are directly defined by current legislation. Qzero Energy Building offers both passive and active ventilation systems since small ventilation units up to big industrial ones always prepared according to customer needs. The main units are indicated in the figure 4. Passive ventilation consists of special tubes that are installed in the ground and achieve high energy efficiency by the energy exchange with the soil. Active systems consist of filter and hydraulic, electric, control and other components where these systems can fulfil specific space condition requirements and combined together with passive systems have excellent results in terms of the energy efficiency.

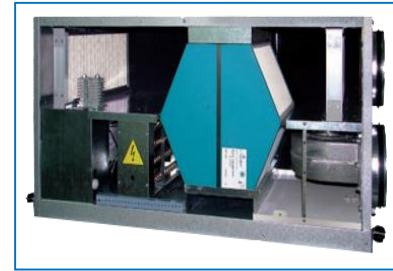
Figure 4. Ventilation systems



Order made ventilation unit
Source: Qzero Energy Building



Passive ventilation channel



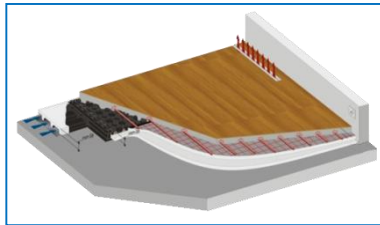
Industrial unit

2.1.6.3 Distribution units

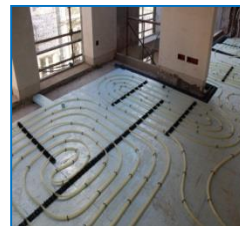
The main propose of distribution units is to bring heat or cold from the energy group to the air-conditioned or heated space. There are three main groups of distribution units as indicated in the figure 5, the ventilated floor radiant unit, hydraulic floor and walls units and fancoil units. The ventilated floor unit is suitable for cases with the need of ventilation together with heating and cooling. It is a sophisticated solution that offers better space utilization with the highest efficiency. The second group, hydraulic floor and wall are more suitable for heating proposes. Cooling has a limited potential because the temperature in the piping shouldn't be too low in order not to cause condensation and displeasure. The main benefit is the uniform temperature distribution and high comfort levels. The last group are the fan coils where there exist various types of these units according to specific project needs. These units are suitable for heating and cooling in the buildings with high thermal gains such as office buildings, shopping moles,

schools, server rooms etc. The main advantage is that these units have quick reaction times and offers high flexibility in terms of applications.

Figure 5. Distribution units



Ventilated floor unit for heating cooling and ventilation
Source: Qzero Energy Building



Hydraulic floor and wall units for heating and cooling

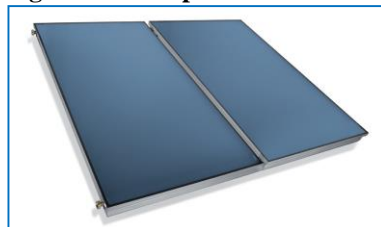


Fancoil unit for heating and cooling

2.1.6.4 Solar panels

The solar panels serve primarily for hot water heating and swimming pool heating, but there can be other purposes associated with these solutions. There are two solar panels groups, the first is the conventional flat solar panel and the second is the vacuum tube as shown in the figure 6. The difference between both solutions is that the vacuum tubes do not loose heat and maintain high efficiency also in the climax with low temperatures. Therefore the vacuum tubes are more appropriate for swimming pool heating and the standard flat panels for domestic hot water heating.

Figure 6. Solar panels



Flat panel
Source: Qzero Energy Building



Vacuum tube panel

2.1.7 Services

Qzero Energy Building has in its offer four main groups of services, the preliminary study, the preparation of all technical and legal documentation, the project management and installation execution. It also offers warranty and after sale services. All main groups are indicated in the figure 7. The preliminary study includes quotation with commercial description of the main system parts and main benefits, some design drawing, technical information and hydraulic schemes. Other service is the complete preparation of project documentation such as piping dimensioning, specific hydraulic schemes, electric drawings and control schemes. The project management and installation execution consists of the planning of all project phases, material and logistics management, communication with other specialties that are present in the project and outsourcing of some services such as energy management program preparation etc. As for the warranty the standard period is of five to ten years depending on the character of each project, the type of units implemented and other factors.

Figure 7. Services diagram



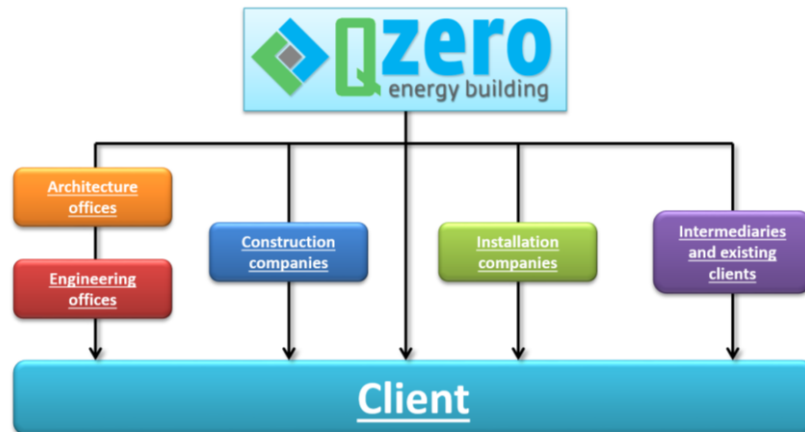
Source: Qzero Energy Building

2.1.8 Current market approach

The figure 8 shows a current way that the market is being approached. In order to gain more contacts, it is necessary to connect directly with the possible client or indirectly via the architects, engineers, constructors, installers, existing clients and intermediaries. This is often not a simple task because of the weak knowledge about the systems or conflicts of interests. Architects have only global awareness about the existing systems and therefore are not capable of distinguishing between the quality and energy efficiency, on the other hand, they have normally close relations with the client because they maintain frequent contact. Engineers responsible for the global project are interested in closest support possible and can also be helpful to acquire new business, the issue is that the support can be costly for the company and they can abuse the situation and try to use the knowledge for their own good. They know well the HVAC solution and can help to convince client by explaining the technical part. The construction companies and installers are mainly focused on the economic part of the proposal because they stand between the client and the service supplier and the better offer they get, the

high benefit they gain. Their awareness about HVAC solution is mediocre. Intermediaries and existed clients are the best way to get new business because they have common interests and can personally recommend the company as a credible one and also possess solid knowledge about the solution.

Figure 8. Market approach



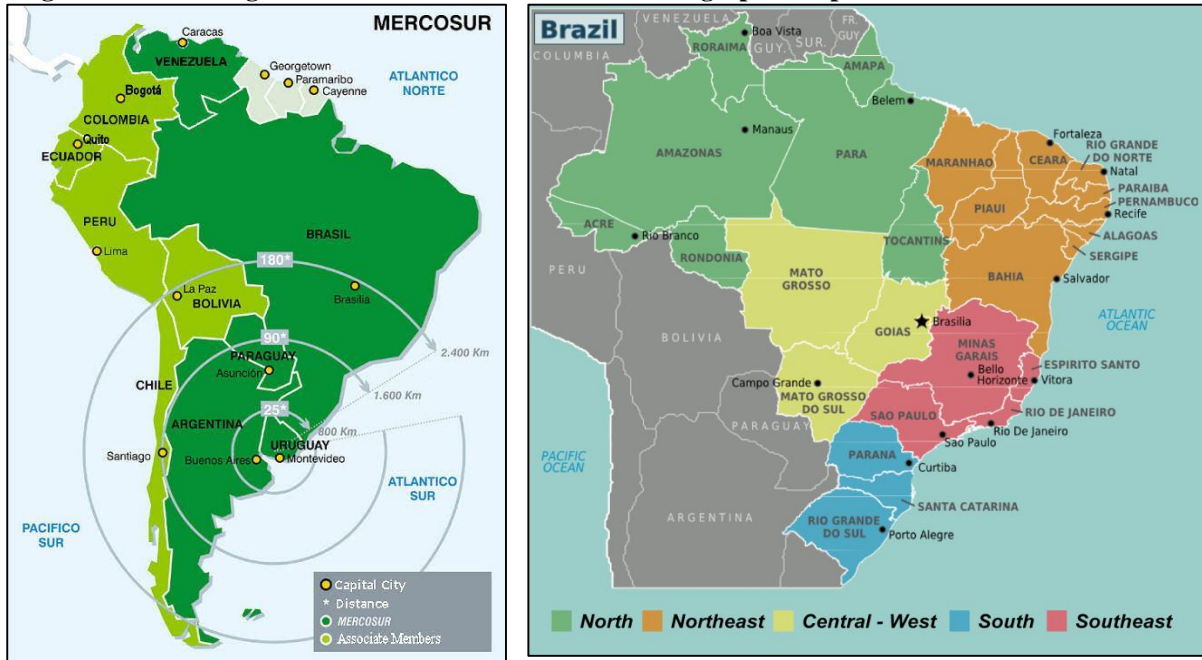
Source: Qzero Energy Building

2.2 Target market

2.2.1 Main market characteristics

Brazil federative republic with the president Dilma Rousseff was constituted in 1988 and covered the total area of 8 515 767 m² with 196 655 014 inhabitants (WDB, 2011). The population density is 23.1 people per km². The republic is constituted by 26 states and one federal district. It is grouped into five main regions as shown in the figure 9, North region, North East region, West Central, Southeast region and South region (BE, 2013). The capital city is Brasília with the population of 2 570 160 inhabitants where other important cities are São Paulo with the population of 41 262 199 inhabitants, Rio de Janeiro with 15 989 292 inhabitants, Salvador with 2 675 65 inhabitants, Belo Horizonte with 2 375 151 inhabitants and Fortaleza with 2 452 185 inhabitants (IBGE, 2013). The political regime in Brazil is democracy which causes market openness, competition existence and theoretically higher benefit for the final costumer in terms of the price and quality. On the other hand it causes higher differences in the wealth distribution because in democratic system the main focus of its members is to maximizer welfare. Democracy regime is also a good soil for innovation because the legal system respects the rights about privacy and intellectual property.

Figure 9. Brazil integration in Mercosul and Brazilian demographic map



Fonte: Mercosul, Mapsoft

Brazil federative republic together with Argentina, Paraguay, Uruguay and Venezuela is an integrated member of the economic block designated as Mercosul, see the figure 9 for more details. Mercosul was constituted in 1991 in order to secure more sustainable economic development and growth of its member countries. Its main objective is to secure free circulation of goods, services and production factors and eliminate the restriction imposed in the border between the countries. Other important goals of Mercosul are the establishment of the common commercial policy to the third part countries, the coordination of the international economic interactions and the promotion of competitive environment of the block members. The main areas of intervention are agricultural sector, capital industry, services, transportation industry, communication industry and others. Most important policies are fiscal and monetary policies and external commerce promotion policies (Mercosul, 2013).

2.2.2 Cultural aspects

2.2.2.1 Overall cultural aspects

The official language is Brazilian Portuguese and the official currency is the Brazilian Real. The religions and believes are guaranteed by the free constitution where 65% are Catholics, 22.2% are Evangelists and 5.2% are of other religions (World Data Bank, 2011). According

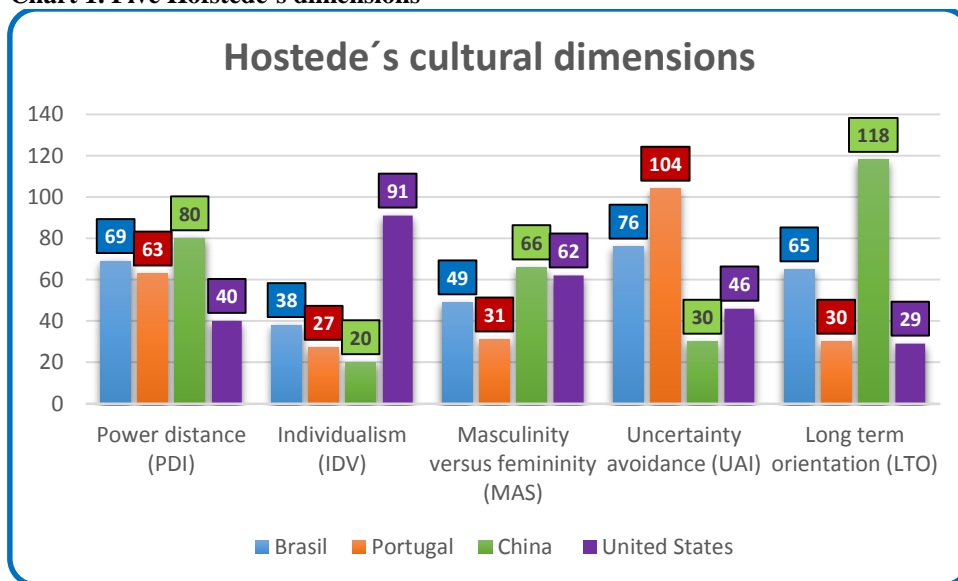
to the information from Brazil Business (2013), Brazilians spend billions of Reals for religion, they pay “dizimos” which normally represents ten percent of their income. The churches, temples and religious institutions also gain money by means of services such as ceremonies of weddings, funerals, baptism etc. Another income is represented by selling religious objects such as prier cards, bibles and saints sculptures. Brazilians tend to have psychological connection with such objects and they strongly believe in the powers of saints and prayers.

As for other cultural characteristics, gift giving is almost mandatory when invited to someone’s house, to birthday celebrations and weddings. When having lunch with friend, small gifts are common too, but close friends tend to give less importance to gifts. The gift giving is very common in the occasion of a newly born child or when visiting the mother that is expecting a baby. In these occasions, it is preferred to bring flowers for the mother and a practical gift for the future or the newly born child. Gift giving obeys some simple rules that can help to avoid embarrassing situations. When going to the party it is advised to bring a food or beverage, and for a friendly afternoon visit it is more common to bring a food that matches a tea or coffee. Flowers and chocolate are universal gifts for lunches, afternoon dinners or informal occasions. When going to somebody’s new house, a decorative item is advised. The greeting habits are also important to know. Between the men the handshake is the most common way, two women and men to women kiss two or three times on the cheek. When communicating with another person, the eye contact is very important together with sincere communication style and free opinion expression, it is also common to interrupt and be interrupted during the conversation. Small personal space and small touching are common during the conversation too. In the business word, the conservative dress is preferred for the most formal occasions, in the case of men it is normally dark suit and for women the most suitable is an elegant not sexist suit or dress. Business card exchange is more usual during the introduction and the utilization of titles as Engineer or Doctor can be quite tricky where it is advisable to hear the second part to speak first. During the business meetings, friendly conversation is preferred to short small talks and punctuality is positive, although the Brazilian people do not normally arrive on time for the meeting. In the negotiation, the decision factor can be personal chemistry and friendly patient approach. Relationships have high importance (Culture Crossing, 2013).

2.2.2.2 Hofstede cultural model

As a good springboard to obtain a global overview about the Brazilian culture serves the research made by Geert Hofstede (1983) about his five cultural dimension model, Power distance, Individualism, Masculinity versus Femininity, Uncertainty Avoidance and Long term orientation. The final scores of these five dimensions together with graphic comparison are in the chart 1 where for better understanding the scores were compared to China, the United States and Portugal.

Chart 1. Five Hofstede's dimensions



Source: Hofstede Centre

From the results it can be concluded that Brazil scores are quite high in the Power distance which expresses the hierarchical distance in the society. Therefore inequalities among population are acceptable and respecting the status play an important role across the population both in personal and in professional life. It is acceptable that the power holders have better benefits than the “ordinary” people. As shown in the chart, the power distance level is higher than in the United States and lower than in China. Portugal has almost identical ranking in terms of Power distance like Brazil.

In Individualism, Brazil scores close to China and Portugal and far away from the United States. Individualism reflects the degree of self-interest and interdependence among the society. In Brazil the society stands together forming cohesive groups and the self-interest is low. This is also reflected in the family relationships with cousins and grandfathers and

grandmothers, family sticks together and helps the elderly. The business is therefore more based on the relationship, trustworthiness and transparency.

The Masculinity score is in the middle of the punctuation which means that Brazilian society identifies itself with both masculine and feminine characteristics. The masculine characteristics are the drive for success, achievement and strong sense of competition and the feminine are sympathy, encouragement, and helpfulness. For the society the consensus is important and conflicts are to be avoided. As for the comparison with the other states the masculinity is higher than in Portugal and lower than in the United States and China.

The Uncertainty avoidance specifies what the society posture for the acceptance of the unknown future is and whether the situation should be controlled or left to happen. The Brazilian score in this dimension is much higher than the score of China or the United States and a bit higher than in Portugal. Because of the high level of Uncertainty avoidance there is a strong need in defining the legal system in a detail leading to elevated bureaucracy.

Long-term orientation is connected to Chinese Confucius teaching, and expresses whether the society shows pragmatic approach to the future or a more conventional historic short-term orientation. Surprisingly Brazil has relatively high score in this dimension, the change in present condition is being accepted with ease and the goals and objectives are planned some years ahead. In Portugal and United States the long-term orientation is much lower than in Brazil which means that in these states the population establishes its goals focusing more in present and not looking so far ahead to the future.

2.2.3 Infrastructures

Well organized infrastructures and quick, cheap and reliable transportation are vital factors to boost economic growth and attract FDI. In order to attract more investment, sustain competitive advantage in global scale and create more employment, the government started in 2007 a Growth Acceleration Program designed as PAC. The program promotes planning and execution of large scale constructions of logistic, social, urban and energy infrastructures and created 8.2 million jobs during the period from 2007 to 2010 playing a vital role in reducing the impacts of global financial crisis. The first phase main objectives were to improve logistic sector, power segment and urban development and to attract the investment in the amount of 340 billion of US\$. In 2011 was initiated the second phase of this program focused on

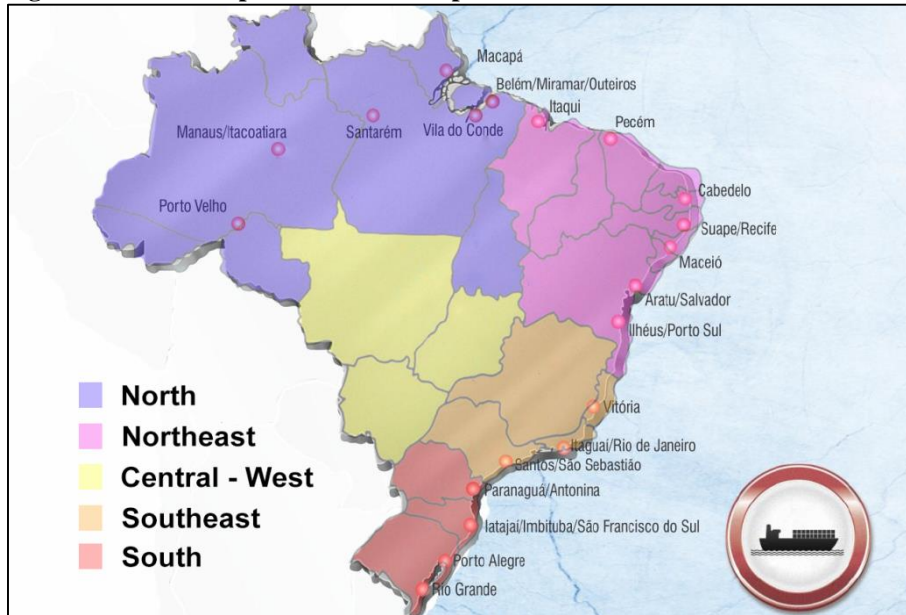
improving the life quality in cities, improving the quality of services in less development districts, building more new houses, providing a better access to electricity and water, improving the quality of roads, railways and other logistic infrastructures and increase the energy production using the mix of conventional and clean renewable energy sources. The total public and private investment should achieve 526 billion of US\$ where the investment in the sector of transport and logistics which comprises roads, railways, ports, airports and the heavy equipment until June 2013 achieved 387 billion of US\$ (PAC, 2013).

Other large scale investments in infrastructure will occur due to the World Cup in 2014 and the Olympics in 2016. According to the information from the Ministry of Sport and the information obtained in the Portal of Transparency, the investment for a World Cup will be in total of 16.6 billion of US\$ where 11.5 billion of US\$ will be spent in order to improve infrastructures such as stadiums, urban mobility infrastructures, ports and airports. 1.9 billion of US\$ will be invested to improve telecommunication and the energy sector, 5.8 billion of US\$ security and health services and 0.9 billion of US\$ will be allocated to improve the quality of hotels. As for the Olympics, it is estimated that the total investment in infrastructures will be approximately 6.3 billion of US\$.

2.2.3.1 Ports

The Brazilian coast line in total has more than 8500 navigable kilometers where ports are responsible for about 90% of country exportation and importation of various goods with the annual turnover of this sector close to 700 million tons (ANTAQ, 2013). The growing economic activity during the last years leads to increase of the utilization of ship transport because of economic reasons and in order to maintain the economic growth and more investment into port infrastructure is unavoidable. Brazil has a solid ports structure as shown in the figure 10. The main issues are that many ports are overloaded with lower capacity than needed, underdeveloped highways and roads which connect the ports with the rest of the country, bureaucracy and working strikes. All these problems are reflected in longer delays during the material shipment and unloading and long waiting queues both for ships in the port and transportation tracks on the way to port.

Figure 10. Brazilian ports structure map



Source: PIL, adapted

To ease the port infrastructural problems, its saturation and access problems, the Brazilian government is showing a positive effort in order to improve the quality of the ports structure and in order to reinforce the highways and railways infrastructure that are connecting the ports between each other and with the interior of the country. According to the Logistic and Planning Company, EPL the future investment into this infrastructure should end the entry barriers, increase cargo handling and secure the overall utilization cost reduction. According to the National Agency for Waterway Transportation, ANTAQ the foreseen investments in 25 years are 25.3 billion of US\$, and until June 2013 has been already improved 15 infrastructures in 11 ports.

The North region is known for its mineral and agricultural potential and in this region are more than 600 facilities that produce electronics and motorcycles. The investment in this region is about 200 millions of US\$ by 2017 to terminals for containers, bulk solid and bulk liquid. In this region there are five ports that connect this region with the Atlantic Ocean and four ports situated on the river Amazonia and Madeira. The most important ports of this region are as follows: Porto Velho, Manaus, Itacoatiara, Santarém, Vila do Conde, Belém, Miramar, Outeiros and Macapá.

The Northeast region received an important investment in order to integrate Suape and Pecem to the railroad network where the total foreseen investment by 2017 are 50 million US\$ mostly for terminal containers, bulk solid and bulk liquid. General goods, bulk solid and passengers

are the most common types of cargo (EPL, 2013). In this region are situated ten important ports, Itaquí, Pecém, Cabedelo, Suape, Recife, Maceió, Aratu, Salvador, Ilhéus and Porto Sul. Aratu has a significant importance for the economy of Bahia receiving and draining the industrial products of this state mostly from the Northeastern complex of Camaçari where several petrochemical plants and factories are situated. The main products and materials flowing via this port are sulfur, naphtha, copper concentrate, gasoline, coal and ammonia. Another important port is Itaquí where mainly fertilizers, petroleum products, LPG, vegetable oils, wheat, rice, rails and anthracite are discharged (SEP, 2013).

The Southeast region is the region with the highest industrialization activity and represents the largest market of Brazil. The investment foreseen in this region by 2017 is about 1.45 billion of US\$ and most of this sum is to be invested in building terminals for containers, bulk solid, bulk liquid and offshore support (EPL, 2013). It has five important ports Itaguaí, Santos, São Sebastião, Rio de Janeiro and Vitoria. The container market is more concentrated in Santos and Rio de Janeiro and bulk and solid activity in Vitoria and Itaguaí. Santos is serving for 26 Brazilian states and is being responsible for about 28% of Brazilian foreign trade. Therefore it is considered to be one of the largest and busiest ports in Latin America and has a special importance for the São Paulo economy. The most important goods that are being loaded and unloaded in this port are sugar, soy, containerized cargo, coffee, corn, wheat, salt, citrus pulp, orange juice, paper, automobiles and alcohol. The São Sebastião port was constructed to alleviate the traffic of Porto de Santos where the main export products are machinery and equipment, steel products, vehicles and parts and general cargo. Port Rio de Janeiro also belongs to the category of the busiest ports, despite having logistic problems mainly caused by poor maintenance and distribution of the roads. Between the main disposed products are iron ore, manganese, coal, wheat, oil and gas. Porto de Vitoria faces problems with lack of infrastructure investment, unfinished construction of various projects and problematic access of large vessels. It is foreseen to be serving as one of main bases for gas and oil industry. The main material flow is represented by steel products, soluble coffee beans, cocoa, cereals, marble and granite, iron, pig iron and bulk (SEP, 2013).

South region is known for its high agricultural production levels and it has seven important ports, Paranaguá, Antonina, Latajaí, Imbituba, São Francisco do Sul, Porto Alegre and Rio Grande. The most bulk material together with agricultural material flows from Paranaguá and Rio Grande. Pranaguá and Itajaí have high flow of containers, bulk solid and bulk liquid. The foreseen investment in this region is 50 million of US\$ by 2017 in order to improve the quality

and build new terminals of bulk solid, bulk liquid and containers (EPL, 2013). Rio Grande is a highly developed port with solid expansion development, rapid entrance, good logistic conditions and no saturation problems and therefore it is preferred by many exporters and importers. It is known for exporting commodities such as soybean meal, soybeans and rice to destinations as France, Japan, Holland, China and Spain. Through this port raw and hazardous materials are imported such as sulfuric acid, natural calcium phosphate, granular potash and urea. These materials are imported mainly from the United States, Argentina, Morocco and China. Another important port of South region is Itajai. This port suffers from floods and saturation of access roads. It is used for exportation of paper, tobacco, sugar, machinery, wood and ceramic floors and for importation of wheat, chicken, ceramic floors, chemicals, textile, and motors. Porto de Paranaguá is the largest port in the export of agricultural products such as soybeans and soybean meal. Like most of Brazilian ports it suffers from saturation problems, lack of access roads and low structure to handle high current exports. It is an important port for ships from Paraguay, South Korea, Japan, China and the United States. (SEP, 2013).

2.2.3.2 Highways and Railways

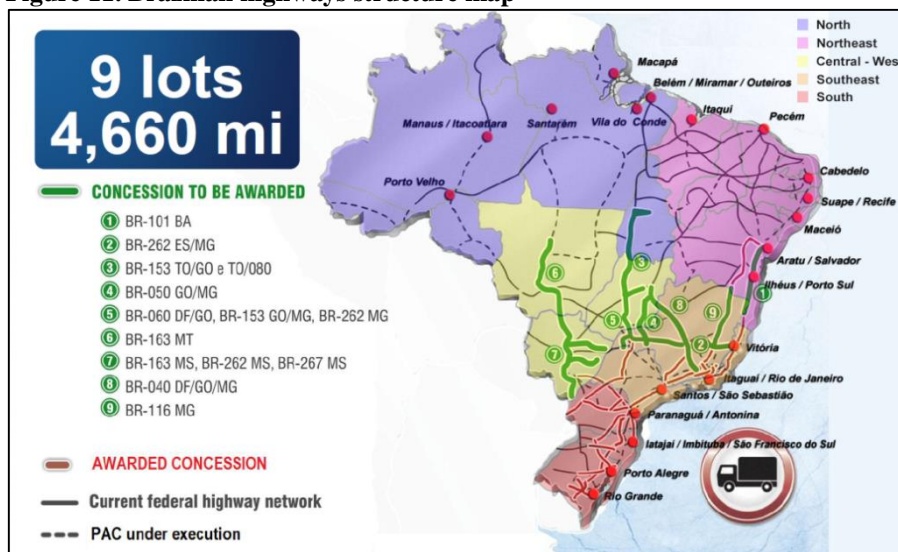
In August of 2012 the Brazil's national Logistic Investment Program: Highways and Railway was launched in order to improve the accessibility and the connection within the country. According to the Brazilian president, the expected outcomes were the transport cost reduction and higher competitiveness of the country. The program should also promote private and public partnership and help to achieve better integration of the main infrastructures such as airports, ports and railways with supply chains. The government is responsible for regulating and overseeing services via National Land Transportation Agency, ANTT providing financial support and long-term financing from Brazilian Development Bank, BNDES and planning the process through EPL.

According to the program, the total investment is R\$ 133 billion where for the construction of 7500 km (4660 mi) of roads R\$ 42 billion and for 10 000 km (6241 mi) of railways R\$ 91 billion is reserved. In both cases the majority should be invested in the first 5 years. The public sector will participate annually with the injection of R\$ 25 billion and the rest of the investment will be extended by the private companies which will be selected through public auctions and be responsible for the construction and management of the roads and the construction and management of the railways. The government will buy out *a posteriori* the whole railway

capacity from the contracted companies in order to have a better control and lower the demand risk. Candidate selection will be carried out by public auctions and in both cases the winning private company will be the one with the lowest fares. Until June 2013 1899 km of highways and 555 km of railways were already concluded (PIL, 2012).

As shown in the figure 11 Brazilian highway structure has a lot of space for improvement. The present main road and highways infrastructure shows a lot of weaknesses in terms of quality and quantity of available connection both in interior of the country, in the peripheries and in ports. The current federal highway network has higher density in the Northeast region that has the higher number of ports and the lowest in the North region with the lowest port structure and population density. According to EPL, the main objectives for a five years horizon are to duplicate the amount of main roads and to improve the quality of the existing infrastructures. The main foreseen works are the widening, maintenance and operation of highways and the construction of side roads.

Figure 11. Brazilian highways structure map

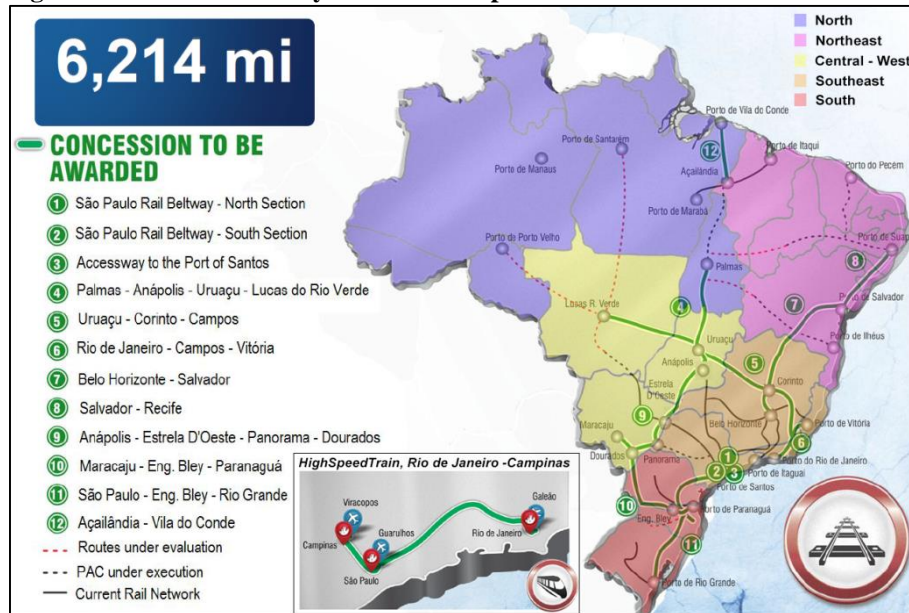


Source: PIL, adapted

It is important to state that many roads are already being built under the PAC program or with awarded concession. Figure 12 shows that most works under construction are in the South, Southeast and North regions. The constructions are improving the accessibility to the ports along almost all the coast way of Brazil and improving the integrity of all regions. According to the Ministry of Economy and Finance, MEFP there are nine lots with a concession to be awarded.

The Brazilian railway structure, as shown in the figure 12 is also going through many changes in the positive sense. The main objectives of the new railway structure are to modernize and expand the existing railway network and to offer better integration of the existing connections. As mentioned earlier, the state will buy the whole railway capacity in order to facilitate its control and supervise its utilization. Clearly, the main effort is to integrate the ports and improve the flow of material through the country.

Figure 12. Brazilian railways structure map



Source: PIL, adapted

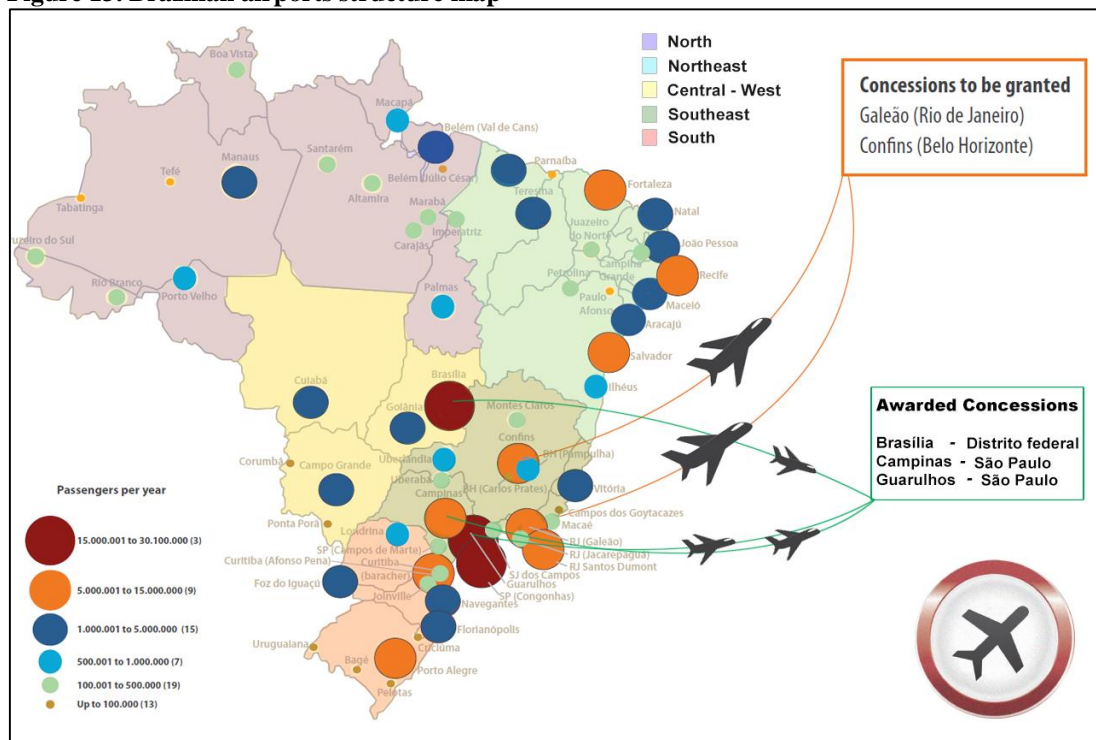
As shown in the above figure 12, the railways in the North, Northeast, Central western and the Southeast region are already being built under the PAC program and many are under evaluation. In the Northeast region, the connection between ports Pecém, Suape and Itaquí is being improved and the integration of this region with the railway leading to the North region is under evaluation. The North region has under evaluation two railways connecting Santarém port and port Porto Velho with Lucas R. Verde in the Central western region. According to the MPFE, there are twelve lots with a concession to be awarded.

In 2014 the construction of the Brazilian hi-speed train is also planned to start which will connect Rio de Janeiro with São Paulo and continuing to Campinas and will be the first hi-speed train in Brazil. The railway of this train will pass through the three major airports of Brazil and cross the most important economic regions of the Brazilian country.

2.2.3.3 Airports

Brazilian airports are controlled and regulated by Department of Civil Aviation, DCA and National Agency for Civil and Aviation, ANAC. The infrastructure investment is carried out by the state company Infraero. The most important airports and their utilization together with more information are shown in the figure 13. In order to decrease the risk of operational bottleneck and speed up the capacity expansion preparing the airports to the World Cup and Olympics, Brazilian government started the privatization process, though waste majority of construction works in airports are being handled by Infraero. As found in the research of Wanke (2012) who studied the efficiency of 63 most important Brazilian airports, most of Brazilian airports suffer from the lack of management efficiency and infrastructure capacity. The exceptions are the airport Galeão, Rio de Janeiro which shows the rising returns-to scale and Guarulhos, São Paulo and Congonhas, São Paulo where the technical inefficiency is low. According to Wallstreet Journal, the capacity limitation also limits the competition between the airlines.

Figure 13. Brazilian airports structure map



Source: CAPA, adapted

According to the Center for Aviation, CAPA and as shown in the figure 13 the five busiest airports are as follows Sao Paulo Guarulhos International Airport, Sao Paulo Congonhas

Airport, Brasilia International Airport, Rio De Janeiro Galeão International Airport and Belo Horizonte Tancredo Neves International Airport.

There are three awarded concessions, namely concession for works on airport Brasília in Distrito Federal, Campinas Guarulhos in São Paulo. Airport Galeão in Rio de Janeiro and Cofins in Belo Horizonte are an investment opportunity with concession to be awarded. The foreseen investment into Galeão infrastructure is about 2.4 billion of US\$. The investment should be used for a construction of 26 more boarding gates, 1850 vehicles and enlarging the cargo storage facilities for Olympic Games and other constructions. As for a Cofins airport in Belo Horizonte, there are planned to be injected 3.5 billion of US\$ in order to construct at least 14 passenger's gates and add parking lots between other constructions (CAPA, 2013).

2.2.4 Brazil in comparison to Latin America

2.2.4.1 Poverty and social indicators

The table 1 contains the main poverty and social indicators of Latin American countries serving as a basic comparison. Brazil is the country with major population in mid-year and takes the fourth place in the Gross National Income per capita, GNI per capita, which is the sum of GDP and other incomes from abroad divided by mid-year population. As for the annual average percentage growth of population and labor force Brazil indicates one of the lowest values from the table. In 2011 Brazil was one of the countries with the lowest percentage of population below the national poverty line from Latin America. In 2011 almost 85% of the population were living in the main metropolis, which is the average of this indicator in Latin American countries. Life expectancy doesn't vary significantly across the countries achieving in Brazil about 73 years. Infant mortality in Brazil achieved one of the lowest levels compared to other countries from the table with the value of 14 per 1000 births. Brazil takes the last place of Latin American countries in the category of population literacy achieving 90% in 2011.

Table 1. Poverty and social indicators

	2011		Average annual growth 2005-11		Most recent estimate (latest year available, 2005-11)				
	Population in mid-year (millions)	GNI per capita (Atlas method, US\$)	Population (%)	Labor force (%)	Poverty (% of population below national poverty line)	Urban population (% of total population)	Life expectancy at birth (years)	Infant mortality (per 1,000 live births)	Literacy (% of population age 15+)
Argentina	40.8	9740	0.9	0.8	30	92	76	13	98
Bolivia	10.1	2020	1.6	2.6	51	67	67	39	91
Brazil	196.7	10720	0.9	1.5	21	85	73	14	90
Chile	17.3	12280	1	3.1	15	89	79	8	99
Colombia	46.9	6070	1.4	2.2	34	75	74	15	93
Ecuador	14.7	4200	1.5	1.7	29	67	76	20	92
Peru	29.4	5150	1.1	3.5	28	77	74	14	90
Paraguay	6.6	3020	1.8	2.9	32	62	72	19	94
Uruguay	3.4	11860	0.3	1.3	14	93	76	9	98
Venezuela	29.3	11820	1.6	2.1	32	94	74	13	96

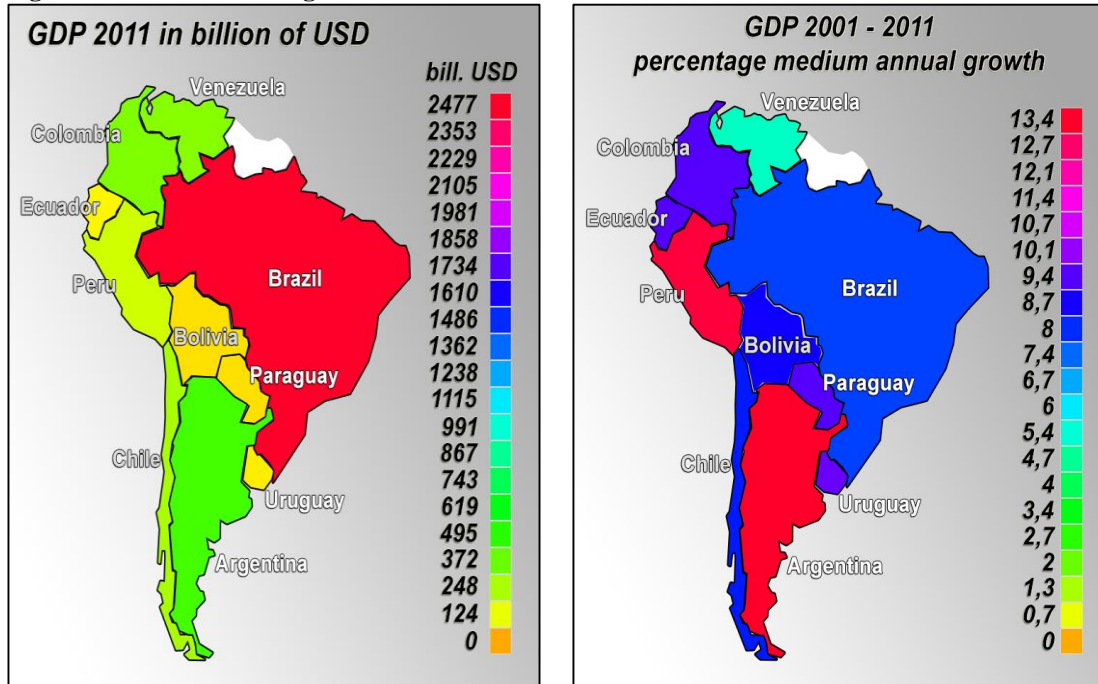
Source: WB

2.2.4.2 Key macroeconomic indicators

In order to reflect overall economic situation of most important countries of Latin America four main economic variables were chosen as indicated in the table 2. The GDP and its annual growth, the GDP per capita annual growth and exportation of goods and services. For better comprehension, the heat map was constructed. The comparison period is since 2001 to 2011 which gives the overall idea but doesn't reflect the contemporary situation.

As expressed in the figure 14 Brazil is the country of Latin America with the highest GDP leading with tremendous difference. Argentina takes the second place with almost six times lower GDP value followed by Colombia and Venezuela. In the percentage annual medium growth of GDP Brazil achieved the average annual growth along the measured period of 2.6% and is positioned on the last but one place in comparison to its Latin America neighbors. On the first place is positioned Argentina with 6.7% medium growth followed by Venezuela with 6.6% and Uruguay with 4.8%.

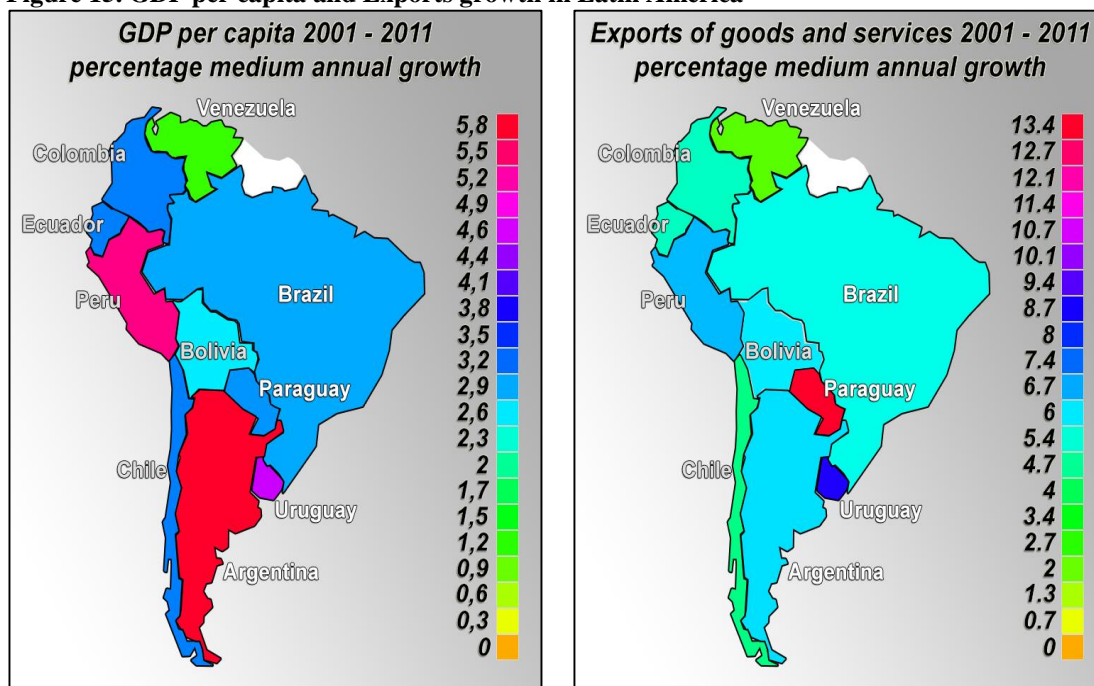
Figure 14. GDP and GDP growth in Latin America



Source: WB

GDP per capita annual growth (figure 15) along the measured period indicates that a Brazil with the value of 2.9% is positioned in the last half in comparison to the Latin America's countries. Argentina, Peru and Uruguay were countries with highest average GDP growth with 5.8%, 5.4% and 4.6% respectively. The exportation grew more in average in Paraguay with 13.4 % medium growth followed by Uruguay with 8.8% and Peru with 6.5%. Brazil demonstrated the average growth in exportation of 5.6%.

Figure 15. GDP per capita and Exports growth in Latin America



Source: WB

Table 2. Key economic indicators

	2011	(Average annual growth %) 2001-11		
	GDP (US\$ billions)	GDP	GDP per capita	Exports of goods and services
Argentina	446	6.7	5.8	6.1
Bolivia	23.9	4.3	2.6	6
Brazil	2 476.7	3.9	2.9	5.6
Chile	248.6	4.1	3.1	4.5
Colombia	333.4	4.7	3.1	5.2
Ecuador	65.9	4.7	3.1	5.2
Peru	176.9	6.6	5.4	6.5
Paraguay	23.8	4.7	3	13.4
Uruguay	46.7	4.8	4.6	8.8
Venezuela	316.5	2.6	1.1	2.2

Source: WB

2.2.4.3 Business environment indicators

As a good springboard for a measurement of local firm position in the business environment of a country compared to other countries worldwide serves a ranking of the program Doing Business which is prepared by International Finance Corporation, IFC together with the World Bank, WB. The methodology to assess the overall county position is taking into account ten principal categories with various subcategories where the total rank expresses the country overall position compared to the rest of 181 measured countries, for the overall ranking of the

main categories of main Latin American countries see the table 3. For the ranking the necessary time and cost of each procedure are taken into account.

In the total ranking Brazil occupies the 130th position. As for a comparison to the main countries of Latin America it still is one of the countries with a most difficult business environment, mostly because of the bureaucracy burden. On the other hand, it was a country with the fourth higher improvement of Latin America's countries climbing up two positions compared to 2012. In the category of starting business which covers all the procedures and payments needed to found and run a company it is on the 6th position. Other indicator, dealing with construction permits encompasses the procedures of the land registration, registration of employees, obtaining construction permits and other. Again Brazilian position compared to Latin America states is low occupying the 8th place. The process of getting electricity in Brazil is one of less complicated in Latin America putting Brazil to the 4th position. Registering property includes mainly operation and procedures to obtain various certificates from various institutions such as Criminal and Labor court and Federal tax agency and Brazil is on the 7th place of Latin America. In the category of accessing the credit, Brazil occupies the 104th position worldwide with the fall of 7 positions and compared to Latin America it takes the 8th place according to this methodology. This is an interesting finding, because the annual reports of the Brazilian Bank and other sources confirm that the situation of obtaining credit is still improving over the years and that ultimately it is much simple to obtain credit that ever before.

Table 3. Doing Business Ranking

	Total rank	Change in total rank	Starting a Business		Dealing with Construction Permits		Getting Electricity		Registering Property		Getting Credit	
	2013	(2013-2012)	2013	(2013-2012)	2013	(2013-2012)	2013	(2013-2012)	2013	(2013-2012)	2013	(2013-2012)
Argentina	124	-8	154	-4	171	1	74	-2	135	2	70	-3
Bolivia	155	0	174	-2	114	-1	126	-4	139	-3	129	-2
Brazil	130	2	121	1	131	-1	60	1	109	-4	104	-7
Chile	37	4	32	-5	84	0	40	1	55	-1	53	-1
Colombia	45	1	61	4	27	-1	134	-5	52	1	70	-3
Ecuador	139	5	169	-4	104	-8	146	-9	101	-26	83	-3
Peru	43	0	60	-7	86	18	77	1	19	2	23	0
Paraguay	103	-3	111	-5	71	-1	26	-2	67	-1	83	-3
Uruguay	89	2	39	-8	158	-3	20	0	164	2	70	-3
Venezuela	180	-1	152	-5	109	1	160	0	90	3	159	6

Source: Doing Business

In the category of protecting investors Brazil occupies the 5th position of Latin American countries having a good reputation of supplying transparent and very consolidated information to stakeholders. With the total of taxes to profit around 69.3%, Brazil is above the average of Latin American countries in the Paying taxes category occupying the 8th of 10 positions. Trading across border is taking into consideration for example the time needed to export and import goods, its costs and duration and all the costs and duration of bureaucracy procedures of importation and exportation both for ports and land means of transport. Brazil occupies the 5th place in this category in comparison to its neighbors from Latin America. Enforcing contracts category consider the number of needed legal services and its overall duration and the attorney cost, court cost and enforcement cost. Brazil scores low in this category ended in the 8th place. As for resolving insolvency, Brazil occupies the 8th place in Latin America and the 143th place worldwide.

Table 3. Doing Business Ranking (continuation)

	Protecting Investors		Paying Taxes		Trading Across Borders		Enforcing Contracts		Resolving Insolvency	
	2013	(2013-2012)	2013	(2013-2012)	2013	(2013-2012)	2013	(2013-2012)	2013	(2013-2012)
Argentina	117	-3	149	-2	139	-36	48	-2	94	-6
Bolivia	139	-3	180	0	125	2	136	-1	68	-2
Brazil	82	-3	156	-2	123	0	116	4	143	-4
Chile	32	-3	36	-1	48	-4	70	-2	98	-9
Colombia	6	0	99	0	91	0	154	-3	21	-2
Ecuador	139	-3	84	6	128	-2	99	0	137	5
Peru	13	4	85	2	60	-2	115	0	106	0
Paraguay	70	-4	141	-11	155	0	106	0	144	-1
Uruguay	100	-2	140	24	104	3	102	1	54	-3
Venezuela	181	0	185	0	166	1	80	-2	163	1

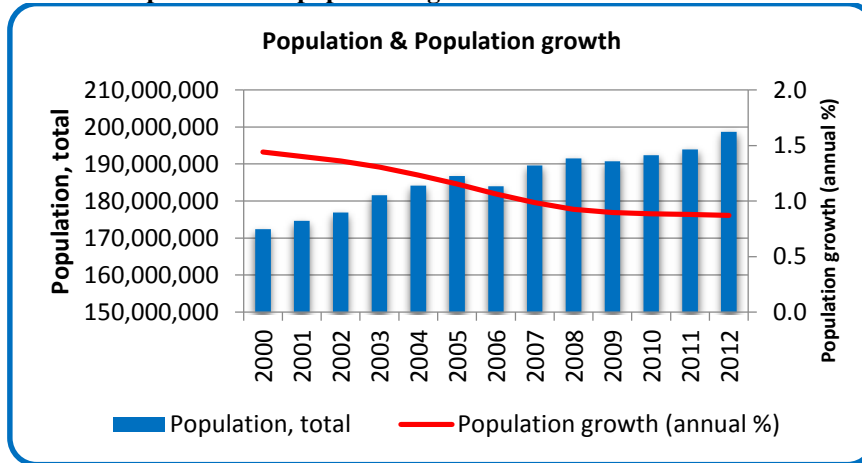
Source: Doing Business

2.2.5 Macroeconomic indicators of Brazil

2.2.5.1 Population and population growth

The chart 2 shows a population count and population growth of Brazil in the last decade. Current population count in the 2013 is around 196.7 million of Brazilian citizens (WB, 2013). The growth in the beginning of the 21st century started at 1.42% and was continuously decreasing, achieving the value of 1% in 2007 and 0.9% in 2013. It can be noticed that since the crisis in 2008 a population growth is almost constant with the value around 0.9%.

Chart 2. Population and population growth

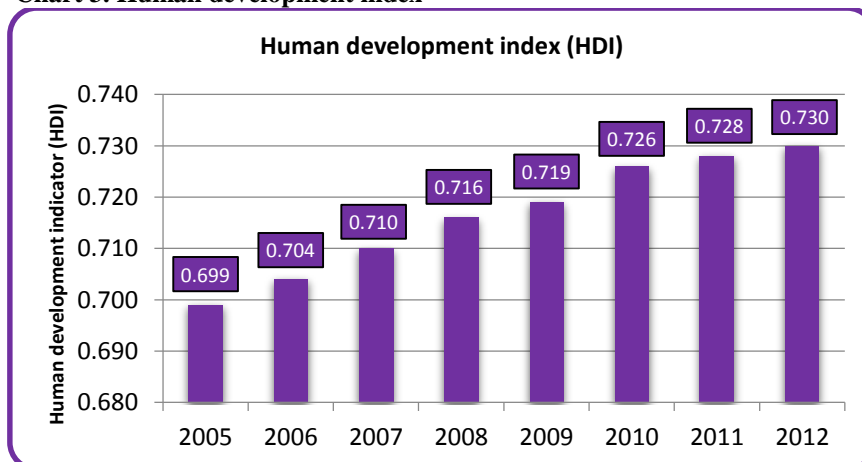


Source: WB

2.2.5.2 Human development index

The Human Development Index, HDI reflects a basic human development dimensions such as level of living standards and accessing to education and knowledge with four dimensions, life expectancy at birth, expected years of schooling, mean years of schooling and the GNI per capita. The dimensions are measured by the United Nations Educational, Scientific and Cultural Organization, UNESCO by its various divisions in order to unify the results. The Brazilian HDI was in 2012 0.730 points positioning Brazil to the 85th place from all 187 compared countries and territories, it is notable from the chart 3 that Brazil has the average annual increase since 2005 to 2012 of 0.72%, where the life expectancy increase by 3%, the expected years of schooling remain the same, mean years of schooling increased by 9% and GNI per capita increased by 22%.

Chart 3. Human development index

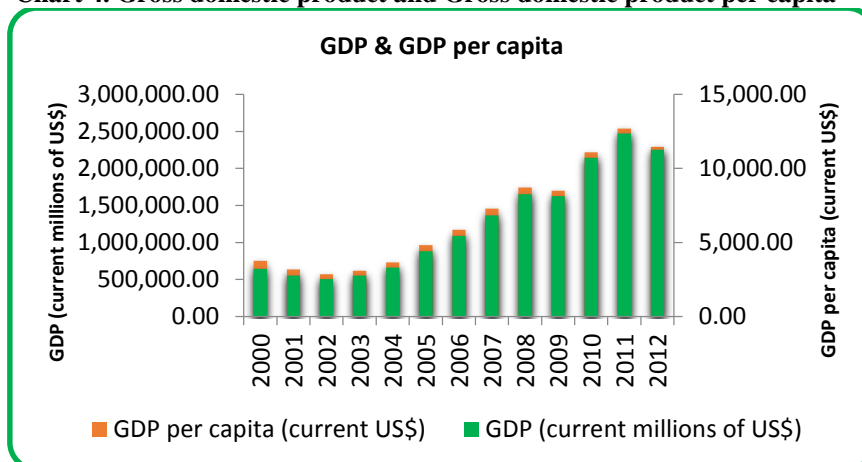


Source: Human Development Report, UNDP, 2013

2.2.5.2 Gross domestic product and Gross domestic product per capita

The chart 4 shows the change of GDP and its annual growth. In the overall comparison it can be said that Brazil shows sustainable economic growth. In the beginning of the century, the GDP were decelerating mostly due to the depreciation of exchange rate, unfavorable international economic environment and energy crises. The deceleration was attenuated in 2001 by good performance in the agriculture sector and high investment levels and in 2002 by expansion of the domestic consumption, improvement in car sales and exportation growth. In 2003 mainly due to the elimination of inflationary risk, monetary easing, improvement of industrial production and the reinforcement of economic activity by microcredits the GDP recovered its growth. Over the years 2004 to 2008 the economic continued to flourish where the main factors responsible for this improvement were the strong industrial, capital and consumer durable production in 2005 and 2006, the positive performance of internal demand, reduction of trade surplus and investment trajectory in 2007 and the stimulation of capital inflows together with creation of infrastructures accompanied by civil construction expansion both stimulated by the PAC program in 2008. In 2009 the crisis was the main factor responsible for the GDP decrease. This decrease was attenuated by the higher levels of household consumption and easier credit accessibility. In 2010 new growth cycle begun with the duration until 2011, during this period grew the industry production mainly of durable, capital and intermediate goods and agricultural sector. Also the PAC program continued and good policies and modernization process were applied. In 2012 GDP again show a slight decreasing, mostly because of the losses of industrial production in the first two quarters of the year (BCB, 2000 - 2012).

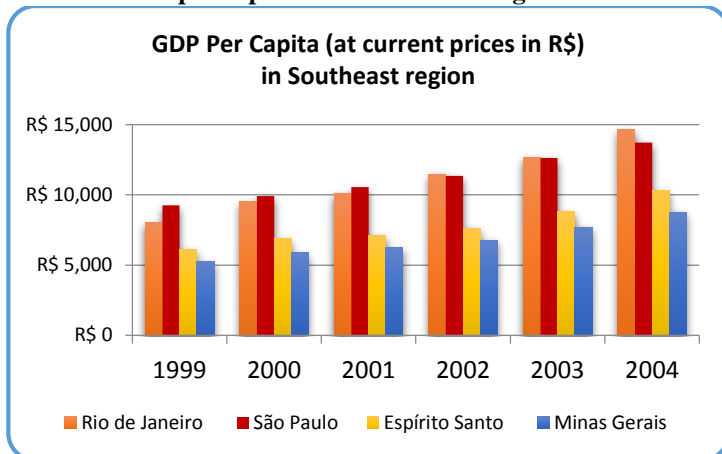
Chart 4. Gross domestic product and Gross domestic product per capita



Source: IBGE

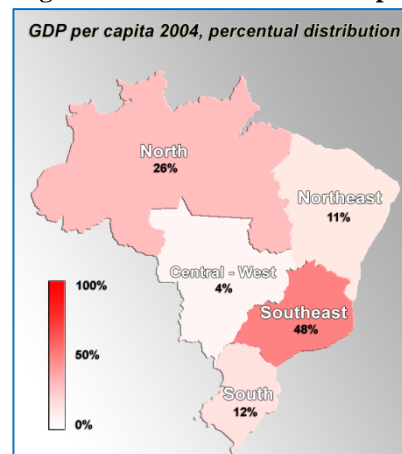
GDP per capita follows the same graphic interpretation as GDP decreasing until 2002, recuperating since 2003 until 2008 followed by decrease in 2009 and achieving the peak in 2011. In 2012 it achieved the value of 14,462.11 US\$. In order to be able to obtain more information about the distribution of wealth, the data of Brazilian Geographical and Statistics Institute, IBGE were used and the heat map was created with the purpose to localize the region with higher GDP per capita. The result interpreted in the figure 16 indicates that the region with highest GDP per capita is the Southeast region followed by the North region and the South region. As for the state distribution in the Southeast region from the chart 5 is clear that the first place belongs to São Paulo and Rio de Janeiro followed by Espírito Santo and Minas Gerais. The more up to date data from all four states for the comparison were from 2004, after this year according to data from IBGE, São Paulo indicated higher GDP per capita development in comparison to Rio de Janeiro and the comparison to other two regions is missing.

Chart 5. GDP per capita in the Southeast region



Source: IBGE

Figure 16. Distribution of GDP per capita



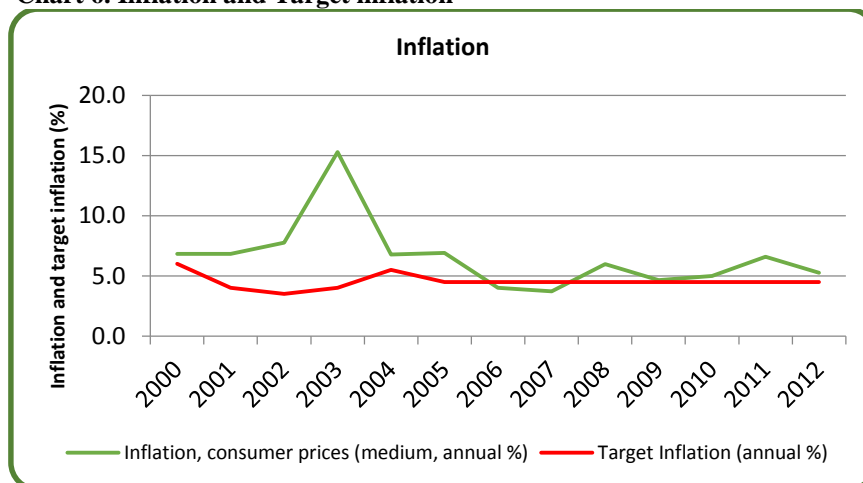
Source: IBGE, own design

2.2.5.4 Inflation and Target inflation

Brazil applied the inflation targeting regime since 1999 that together with fiscal policies should have secured the macroeconomic stability of the country. The inflation annual targets together with medium annual inflation based on consumer prices are indicated in the chart 6. Since 2000 until 2006 the medium annual inflation was higher than the specified target, in 2000 this was mainly because of the volatility of oil prices and increase in food prices. In 2001 the transport, industry prices and wholesale prices grew, especially beef, rice, oranges, fuel and agricultural products. As a response to this price shock, government readjusted the managed prices such as gasoline, diesel, bottled gas and electricity and controlled the demand pressure by applying effective monetary policy. In 2002 inflation increased because of the exchange

rate and the higher level of economic activity. The prices grew almost in all categories such as building materials, industrial components, clothing, electronic devices, cigarettes, alcohol, gasoline, airline fares, health insurance and urban transportation in Rio de Janeiro. In 2003 the inflation achieved its historical peak in observed period with the value of 15.3%. In this year electricity price grew and the fuel and air plane ticket prices have fallen. In the end of the year, the inflation was stabilized on low levels due to macroeconomic policy. In 2004 the inflation was positively affected by the drop of agricultural prices and exchange rate depreciation and negatively by the increase of regulated prices and rise in industrial product prices, tradable goods prices and increase of the prices of inputs, particularly steel. The main actor that had an influence on the inflation in 2005 was the increase of agricultural, fuel, raw material and transport prices. On the other hand, positive impact was driven by declining trend in food prices and good performance in chemical industry that lead to improve the prices of industrial products. Since 2006 until the end of 2012, it can be stated, that the inflation targeting together with fiscal policies brought desirable results because the target of 4.5% was often achieved. There can be seen two peaks during the observed, one in 2008 caused mainly by shock of prices in agricultural commodities and redirection of some crops to biofuel and another in 2011 caused by increase both administrative and market places (BCB, 2000 - 2012).

Chart 6. Inflation and Target inflation



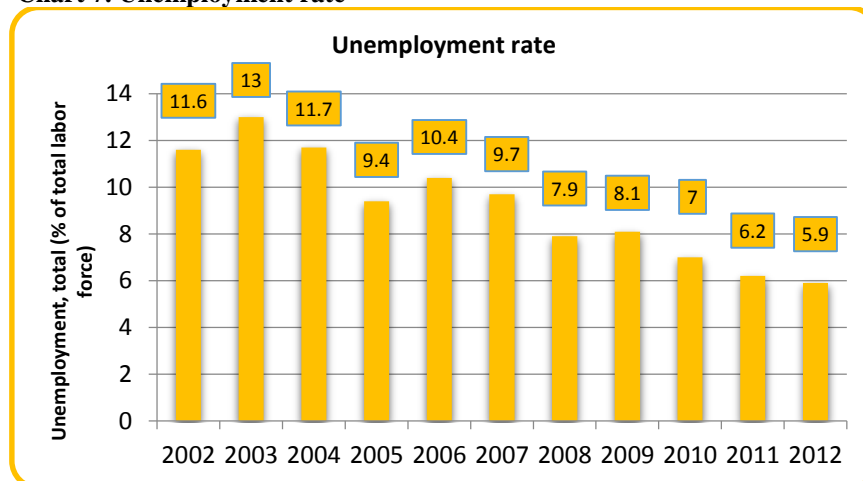
Source: IBGE

2.2.5.5 Unemployment rate

Unemployment rate is measured monthly by IBGE in the six most important metropolitan cities, Recife, Salvador, Belo Horizonte, Rio de Janeiro, São Paulo and Porto Alegre. It can be noted from the chart 7 that the situation tend to significantly improve over the years and there

is a decreasing tendency of the unemployment in this metropolitan cities achieving the value of 5.9% of unemployed population in 2012. Since 2007 the unemployment rate is influenced by PAC program, which since then until 2010 created more than 8.2 million of jobs. The continued decreasing tendency of unemployment should be expected mainly because the strong investment of PAC2 and because of World Cup in 2014 and Olympics in 2016.

Chart 7. Unemployment rate

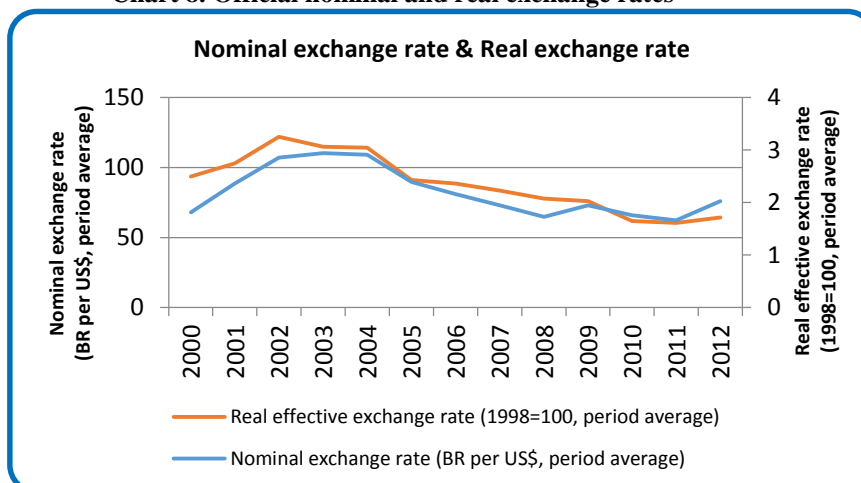


Source: IBGE

2.2.5.6 Nominal and real exchange rates

The fluctuation of the nominal exchange rate, as stated in the theoretical part, has a significant impact on the profit gained in international transactions, this phenomenon is also known as currency risk. For instance when a foreign company sells goods to Brazil and Brazilian nominal exchange rate depreciates it loses money because the selling price in home currency is lower compared to its original value. Real exchange rate in the other hand is measuring the price of a basket of goods of home country relative to foreign and when it depreciates under certain value, the production and material is cheaper in home country in comparison to foreign country, therefore it attracts investors and FDI, appreciation has the opposite effect. Other important factor is a fluctuation of both exchange rates, if the fluctuation over the time period is low and the rates are stable, the margin of risk both for the investors and selling companies is lower. As demonstrated in the chart 8, nominal and real exchange rates have closed characteristics. There is an initial period of appreciation, then slow depreciation and then a period of lower fluctuation since 2010.

Chart 8. Official nominal and real exchange rates



Source: IBGE

2.2.5.7 Interest rate

Interest rate used to construct this indicator is the rate of Special System for Liquidation and Custody, SELIC that serves as an official interest rate for monetary politics decisions. As indicated in the chart 9 the interest rate was decreasing significantly until 2003 than it fluctuated until 2009 which was the year of its minimum and since 2009 the increase took place again. The interest rate can be understood in practical sense as the cost of funding and also as the return on investment. By taking closer look at the curve in the chart 9 it is clear that the interest rate follows exactly the same patterns as a FDI. The interest rate is also related to the nominal and real exchange rates, the higher the interest rate, the higher expected return for domestic investment, higher FDI and capital inflow and in consequence currency appreciation.

Chart 9. Interest rate

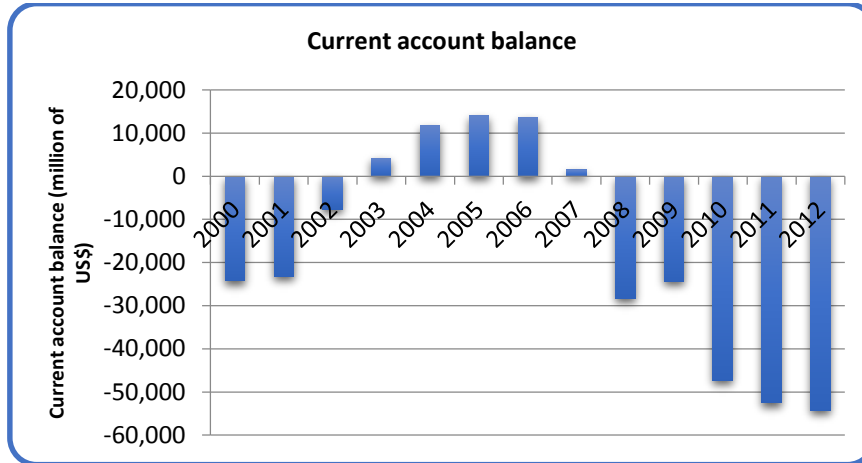


Source: IBGE

2.2.5.8 Current account balance

Current account balance represents the country position and its relation to the rest of the world. If it has a positive sign, the country is a lender to other countries on the contrary negative values means that the country is a debtor. As shown in the chart 10 current account balance achieved its surplus in 2003 to 2007 and deficit before and after this period. In 2000 the current account balance was negatively affected mainly by high oil prices and imports of larger immediate goods and positively by export of manufactured goods. The situation in 2001 in comparison to 2000 improved by around 1 billion of US\$ because of the importation reduction, depreciation of real exchange rate, decreasing of domestic activity and the growth of exportation of soya beans, meat and sugar. In 2002 the improvement continued caused mainly by economic growth, substitution of imported products with domestic ones and higher consumption and exports. 2003 was the first year in the observed period with surplus, where the main factors leading to this improvement were the stabilization of foreign trade because of good performance of exportation, loans guaranteed by IMF with the purpose of easing liquidity crises, positive external account followed by low risk evaluation and high export of vehicles and capital goods. Since 2004 to 2006 the export and import continue to grow and favorable macroeconomic climate leads to maintaining high level of Current account balance surplus. The surplus drastically reduced in 2007 mainly because of the fact that importation grew faster than exportation. This was caused by straiten of the nominal exchange rate and high economic activity. In 2008 the deficit was again achieved caused mainly by decreasing of the export prices and intensification of capital goods imports. 2009 showed some improvement in comparison to 2008, mostly because the prices of importation have fallen. Since 2010 to 2012 the deficit continued to grow where this phenomena was caused mostly by the unequal growth of imports in comparison to exports, increasing of importation of durable goods because of internal demand and the downward trajectory of exports in 2012 (BCB, 2000 - 2012).

Chart 10. Current account balance

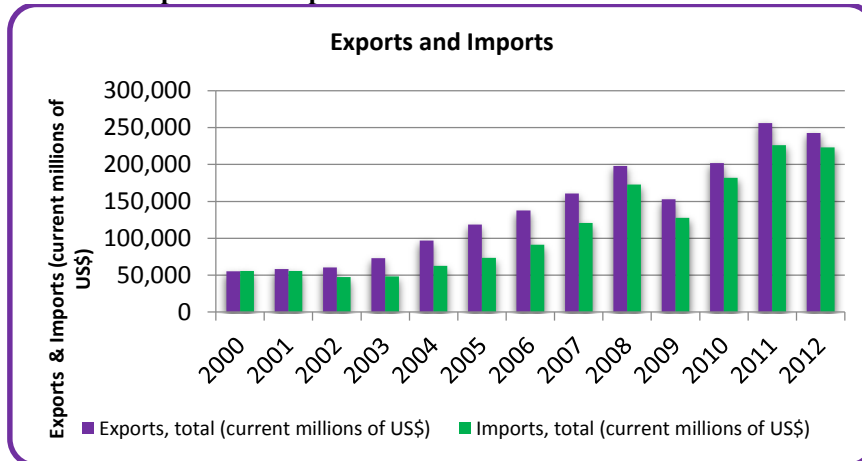


Source: IBGE

2.2.5.9 Exports and Imports

The chart 11 shows the development of import and export since 2000 until the end of 2012. By examining the graphic information it can be noticed that the export grew since 2000 to 2008, in 2009 the fall of around 26% occurred, in 2010 and 2011 the growth continued and in 2012 the fall occurred again. Importation grew since 2003 until 2008 and since 2010 until 2011. It has fallen in 2001, 2002 and 2012. Over the observed period, the most exported products were capital goods, manufactured goods and commodities more specifically agricultural machinery, vehicles, soya beans, meat and sugar, steel products, oil, gasoline, pork, coffee, sugar, cotton and tobacco. The most imported products categories were capital goods, durable customer goods, raw material and intermediate goods. As for the products fuel, lubricants, raw materials, office materials, clothing, and consumer goods were the most imported during the observed period (BCB, 2000 - 2012).

Chart 11. Exports and Imports

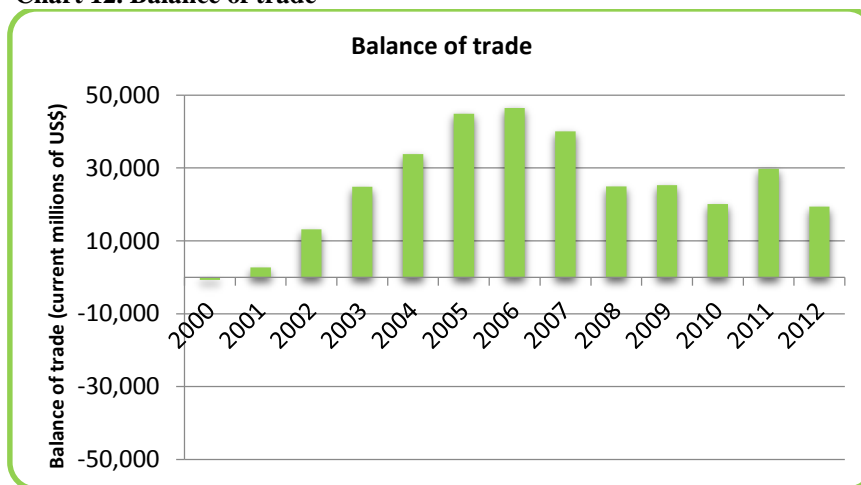


Source: IBGE

2.2.5.10 Balance of trade

Balance of trade relates the national exports to national imports and is represented by the difference between the export and import monetary values. Brazil is known for its protectionism, high importation tax politics and focus on exportation, all this together helps to maintain healthier Balance of trade. As showed in the chart 12 it was negative in 1999 and 2000 and since that the total value of exportation was always higher in comparison to importation keeping the positive value of the Balance of trade.

Chart 12. Balance of trade



Source: IBGE

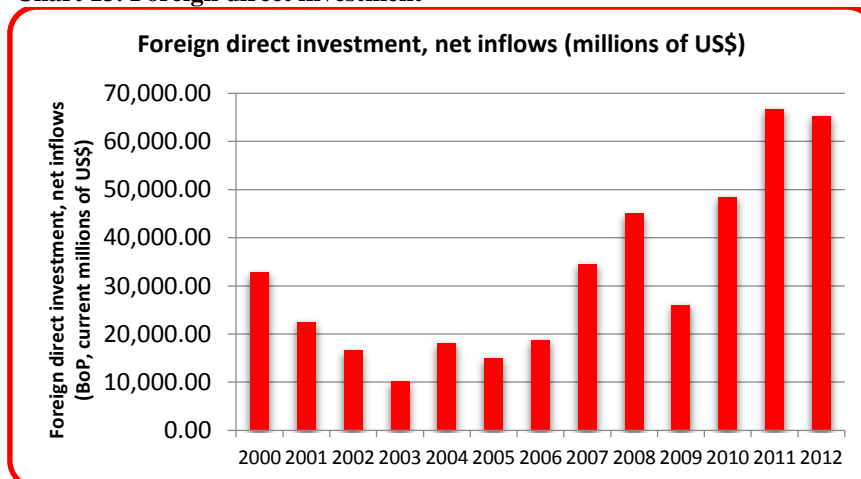
2.2.5.11 Foreign direct investment

The FDI has always an important role for the economic development of Brazil. The solid ground for FDI was created by the foundation of Real Plan, National Privatization Program, PAC and recent economic reforms and bureaucratic improvement for easing the FDI together with improvement of international transparency. Other factor that helped the entry of international investors was the depreciation of real exchange rate which improved the Brazilian attractiveness for investors.

The development of Brazilian FDI of the last decade is shown in the chart 13. The decline since 2000 until 2003 was caused mainly by the low confidence of international investors mainly caused by the instability of the real exchange rate and other politic social factors. In 2004 can be noted the recovery and in 2005 again the drop. Since 2006 to 2009 noticeable economic growth can be observed caused mostly by solid performance of construction industry sector and the creation of PAC. In 2009 the FDI declined again as a result of the global financial crises. Since 2010 to 2011 FDI continued to grow achieving a peak in 2011 followed by slight

decrease in 2012. In 2011 PAC entered the second phase continuing to attract the FDI. As for the future, higher growth can be expected because other large scale investment in infrastructure will occur due to the World Cup in 2014 and the Olympics in 2016.

Chart 13. Foreign direct investment



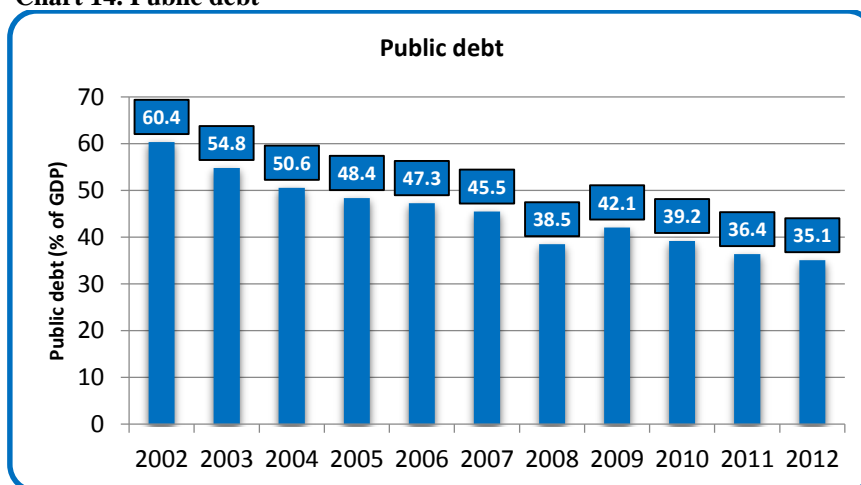
Source: IBGE

2.2.5.12 Public debt

Public debt is an important instrument to finance public investments, such financing guarantee a long-term future for the tax payers. On the other hand it shouldn't be used for financing government expenditure because of high interest rates. In these cases instead the taxes should be used (Maia, 2010). Over the last decade and despite of the crisis and the introduction of the contra cyclical monetary policies, the Public debt was well managed achieving constant improvement where in 2012 the Public debt to GDP ratio was 35%. In 2000 was introduced the fiscal responsibility law and the main priority started to be the transparency of the debt management. It was also started the issuing of the Annual Debt Report, Monthly Debt Report and weekly updated presentations and regular conferences for investors. This leads for improving the rating of the important rating agencies S&P, Fitch and Moody's in 2002. In 2003 the responsibility of managing the external public debt was transferred from central bank to national treasury and the perception of investors was improved because of the improvement in administration of maintaining the fiscal responsibility and monetary and exchange policies. Lately also domestic debt management was transferred to national treasury and rating agencies again improved Brazilian score (OCDS, 2013). According to Institute of International Finance, IIF Brazil was in 2010 the emerging country with best investor relation, great communications

and transparency in disseminating data. The development of public debt is in the chart 14 below.

Chart 14. Public debt

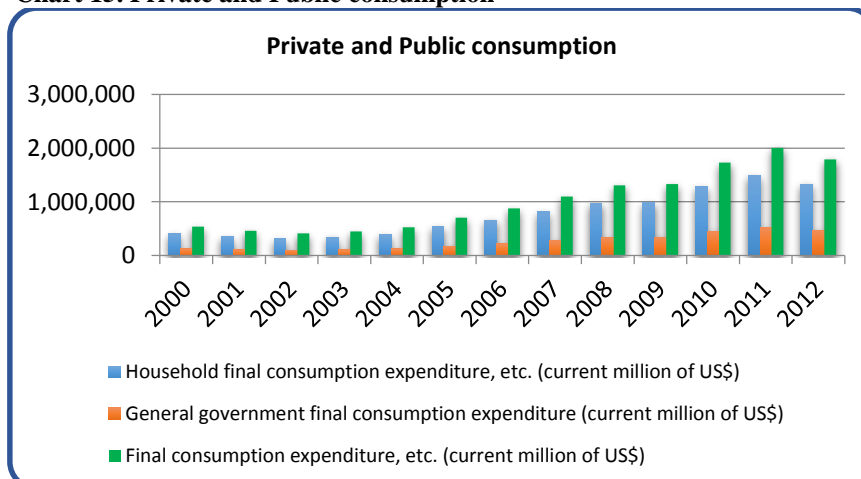


Source: IBGE

2.2.5.13 Private and Public consumption

The Public consumption and Private consumption showed a significant improvement over the observed period as indicated in the chart 15 where the final consumption achieved its peak in 2011. The improvement was mostly due to the higher credibility and optimism of citizens, easier access to the credit and lower unemployment rates. It is noticeable from the figure that the consumption grew much more in the private sector than in the public sector.

Chart 15. Private and Public consumption



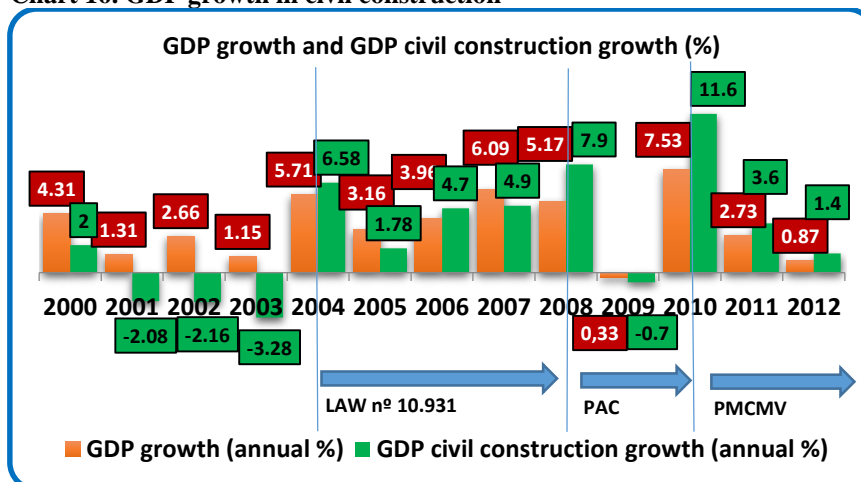
Source: WB

2.2.6 Sectorial indicators

2.2.6.1 GDP growth in civil construction

By analyzing the historical comparison of the civil GDP growth in civil construction to the GDP growth as represented graphically in the chart 16 it can be noticed that since 2004 both indicators are following the same patterns. In 2004 the Law No10.932 was established which created special interest rate regime in order to offer higher benefits for the real estate development by applying the loan interest rate for construction and acquisition of 7%. As a result the confidence for investing into the construction industry improved. In 2007 PAC program was launched which had a positive impact as well and further improved the GDP civil construction growth. The year 2009 was negative both for the whole Brazilian economy and for the segment of civil construction. It was the first year after the international financial crisis and it was the only year in the decade with the negative GDP growth. In order to attenuate the impact of the world crisis and to improve the national economic environment the interest for real estate investing was reduced to 6% and the program My Home My Life, PMCMV was introduced. In 2010 the civil construction industry achieved the best performance of the last decade when it registered the growth of 11.6 %. This positive result was caused mainly by the improvement of credit accessibility and credit growth, lower interest rates, public infrastructure investment programs, salary improvements and better employment performance. The Brazilian GDP growth and GDP growth in civil construction fell in 2011 and 2012 mainly due to the introduction of prudent governmental measures at the beginning of 2011 and due to the cool down of the world economy.

Chart 16. GDP growth in civil construction



Source: CBIC and IBGE

For the future positive growth of civil construction segment could be awaited as there still is a high sum to be invested into the improvement of Brazilian infrastructures under the second phase of the PAC program and into the preparations and infrastructure improvement for the World Cup and the Olympic Games. According to the MEFP the overall investment in 2013 under the PAC program will be of 26.9 billion of US\$ and in 2014 of 34 billion of US\$. As for the World Cup in 2014 16.6 billion of US\$ is foreseen to be invested into all infrastructures where the construction sector will represent the investment of about 11.5 billion of US\$. The estimation of the investment in infrastructures and their improvements for the Olympic Games in 2016 is of 6.3 billion of US\$.

2.2.6.2 Real estate financing of households and commercial buildings

The quantity of HVAC systems installed depends directly on the quantity of the household and commercial buildings acquired and constructed. The evolution of real estate financing in terms of acquisition and new construction together with a number of buildings and households constructed and acquired plays a vital role for the assessment of the construction sector potential.

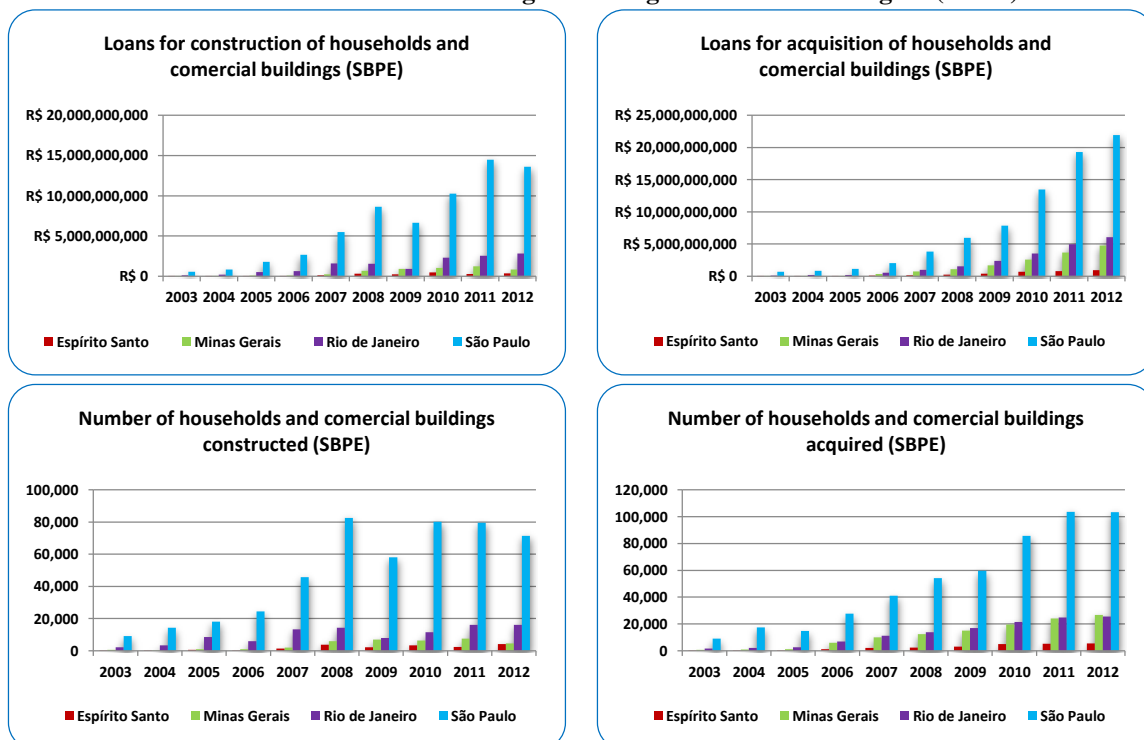
There are two most important sources for the household and construction building financing, the Brazilian System for Savings and Loans, SBPE and the Guarantee Fund for Length of Service, FGTS. The SBPE offers mostly loans for the population with low income and the FGTS for a middle class population. The financing by SBPE for the construction of residential and commercial buildings achieved in 2012 over 28 billion of R\$ and for the acquisition of existing residential and commercial buildings 54.7 billion of R\$ where the total amount of 285 154 buildings was constructed and 162 353 buildings were acquired (SPBE, 2012). The overall financial means granted by FGTS in 2012 were of 107.8 billion of R\$ were 42.8 billion of R\$ were granted to infrastructure improvement, sanitation and households and 510.5 millions of R\$ was the contribution to household financing (FGTS, 2012).

The information available from the SBPE differentiates between the loans for acquisition and for construction of new buildings which is an important comparison because some systems offered by Qzero Energy Building are more suitable for new construction when others can be integrated in the existing ones. The Southeast region in 2012 in the terms of overall financing by SPBE for construction represents 63% and in the terms of financing for acquisition 62%

with the total funding of 82.7 billion of R\$. In this region 285 154 residential and commercial units were constructed and 162 353 were acquired.

The chart 17 shows the historical evolution of loans for construction and acquisition and the number of households and commercial buildings acquired and constructed in all four states of the Southeast region Espírito Santo, Minas Gerais, Rio de Janeiro and São Paulo. When comparing the four regions it is clear that São Paulo is far ahead of the rest of the region in all four categories, it is the state with the most households constructed and acquired and the highest amount of financing attributed. The second place belongs to Rio de Janeiro, third place to Minas Gerais and the last position to Espírito Santo. The financial amount of loans for construction and acquisition has a growing character over the years with some oscillations. In terms of the number of units constructed, the slight downfall can be noticed in almost all states since 2010 and 2011. The same phenomenon is being observed for the amount of acquired households and commercial buildings. This can be caused by the increasing inflation in construction industry and because more expensive households and commercial buildings are being constructed and acquired.

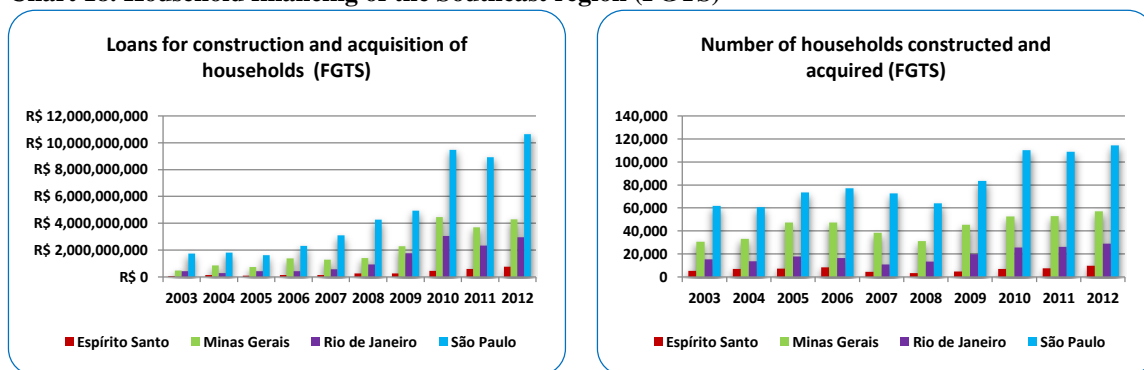
Chart 17. Household and commercial buildings financing of the Southeast region (SPBE)



Source: SBPE, CBIC

In the Southeast region in 2012 the applied resources under the FGTS fund represented 45.1% of the overall Brazilian count where the monetary reinforcement for the residential sector was of 16 billion of R\$ and there were 218 559 habitats constructed and acquired (FGTS, 2012). The evolution of loans for construction and acquisition and the evolution of the number of households constructed and acquired are graphically expressed in the chart 18. It can be noticed that the evolution of the loans granted exhibited similar patterns with the exception of Minas Gerais. There can be noted a growth until 2010 with the exception of 2005, and then a small decrease in 2011 and recuperation in 2012. As for the number of units acquired again, similar patterns are followed where since 2008 until 2010 the amount of residential units built and acquired was increasing, in 2011 a small fall took a place and again the recuperation in 2012 occurred. As in the previous case, São Paulo gained in all categories with the highest financing granted and number of households constructed and acquired, followed by Minas Gerais, Rio de Janeiro and Espírito Santo.

Chart 18. Household financing of the Southeast region (FGTS)



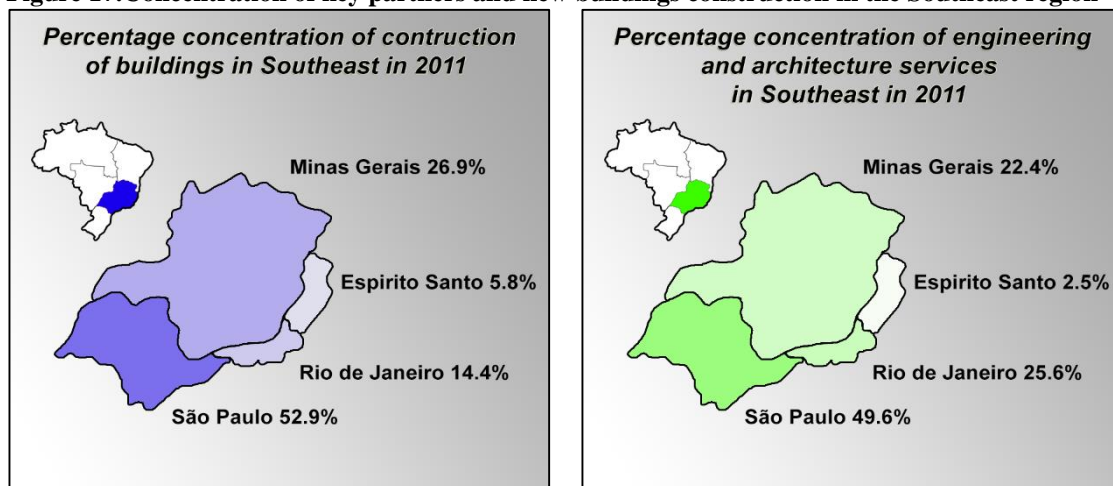
Source: FGTS

2.2.6.3 Concentration

The concentration ratio measures the percentage of the distribution of a specific industry in a specific region or state and it is an important indicator to understand where the industry operates. In order to understand where the highest concentration of construction of new buildings is, the map in the left part of the figure 17 was constructed. Also because a current sales strategy of Qzero Energy Building involves the direct contact with engineers and architects the concentration of this sector was measured as well, this map is shown in the right part of the figure 17. As an entry data the information about the employment was used more specifically the number of working posts of each sector. The number of enterprises of each sector could have been used too, but in my opinion the measurement is more accurate where

each sector is evaluated by the number of employed personal. The figure 17 indicates that the highest concentration of employment of new constructed buildings is in São Paulo followed by Minas Gerais, Espírito Santo and Rio de Janeiro. The presence of possible business partners, engineering and architecture offices is again highest in São Paulo, the second highest is in Rio de Janeiro followed by Minas Gerais and Espírito Santo. It should be taken into consideration that the construction projects in one state can be developed in another state and that it can vary in size and category. For instance, the architects and engineers can work on a project of construction site which is not specifically a building therefore there is not a direct connection between these two concentration indicators. The first indicator simply determinates where more buildings are constructed and the second indicator where the possible partners are concentrated.

Figure 17. Concentration of key partners and new buildings construction in the Southeast region



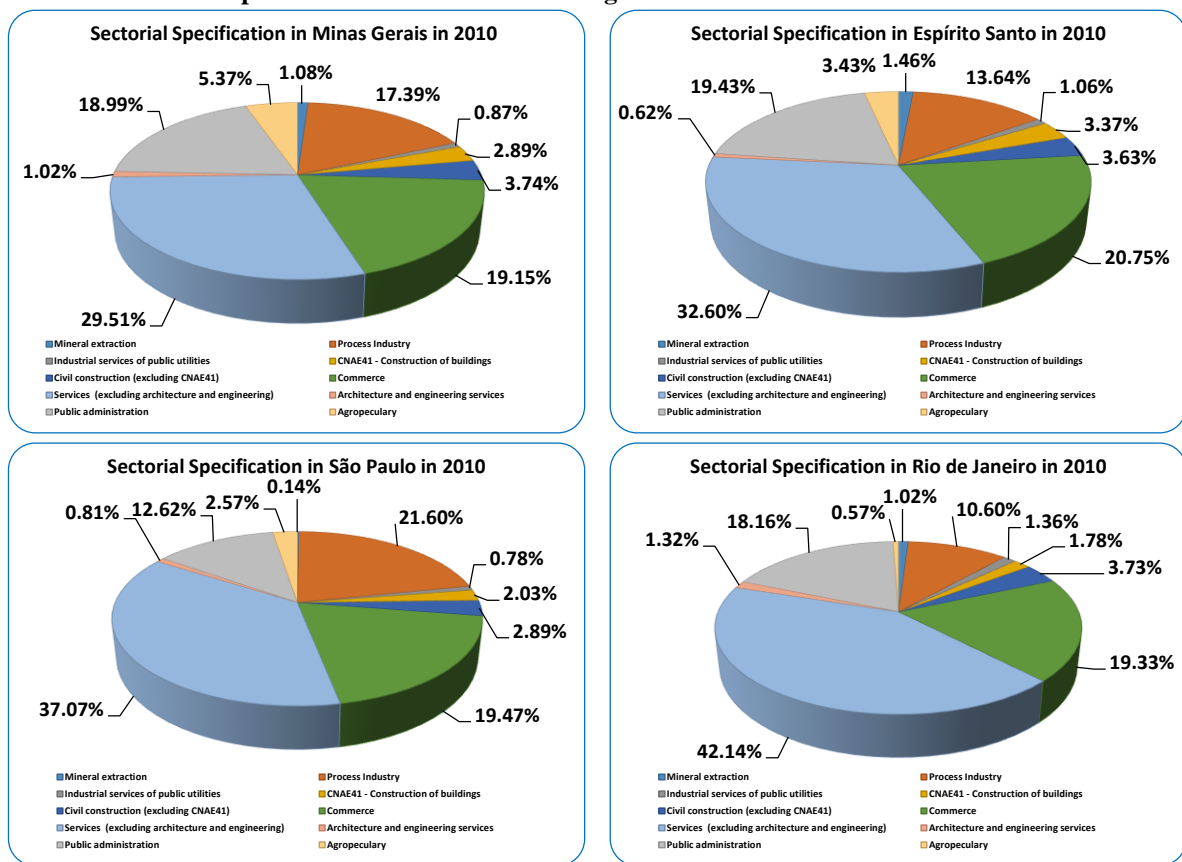
Source: RAIS/MTE, own design

2.2.6.4 Specialization

Specialization is measuring the distribution of specific industry or industries in specific region or state therefore it is an important indicator to assess the weight of each sector in the region. As in the case of concentration the data about employment were used in order to calculate this indicator. The total overall employment of each state was distributed in ten industrial segments where the graphical interpretation is in the chart 19. The segments are mineral extraction, industrial services of public utilities, civil construction (with exclusion of buildings construction), architecture and engineering services, other services, public administration, process industry, construction of buildings, commerce and agropecuary. The construction of buildings has a higher weight in Espírito Santo (3.4%) followed by Minas Gerais (2.9%), São

Paulo (2%) and Rio de Janeiro (1.8%). As for the presence of engineers and architects, the highest percentage belongs to Rio de Janeiro (1.3%), the second place to Minas Gerais (1.02%), the third place to São Paulo (0.81%) and the last place to Espírito Santo (0.62%). The low percentage indicates that none of these four states is specializing in engineering or architecture services. The three most important segments in terms of specialization are other services, commerce and public administration where these three segments together represent 70% to 80% of the employment in each state. It is important to note that the data of 2010 were used for the comparison. This is because the segment of architecture and engineering services did not have more contemporary data about the employment and salaries.

Chart 19. Sectorial specialization of the Southeast region



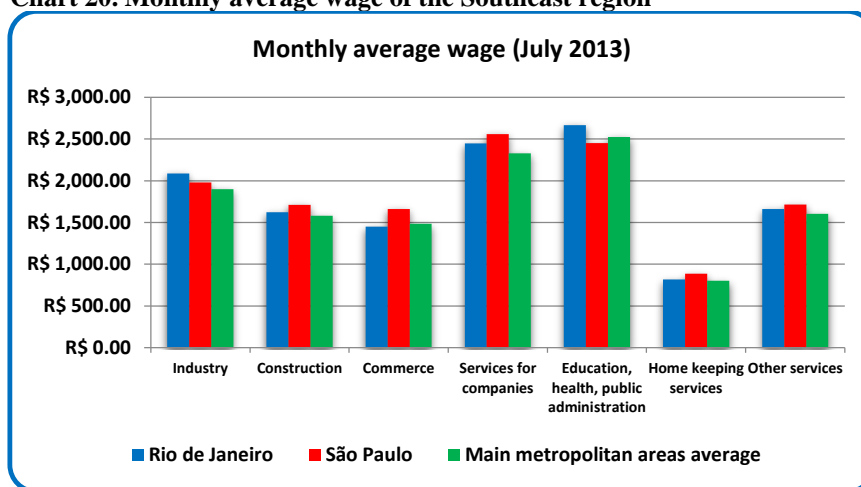
Source: CEMPRE, RAIS/MTE

2.2.6.5 Average wage by sector

The information about the average wage by sector is important in order to target clients with the most financial freedom. Also in combination with the specialization analysis it is possible to assess the potential of each segment. The chart 20 shows the graphic interpretation of the monthly average wage in Rio de Janeiro, São Paulo and the average in six main metropolitan areas Recife, Salvador, Belo Horizonte, São Paulo, Rio de Janeiro and Porto Alegre. As a

source of the data the ftp server of the Brazilian Geographical and Statistics Institute, IBGE was used. From the chart it is clear that the most profitable segments to work in are Services for companies, Education, Health and Public administration, followed by Industry, Construction, Commerce and Other services. The less profitable sector is Home keeping with the lowest salaries. As shown in the graphic interpretation, the average salary in the main metropolitan areas is close to Rio de Janeiro and São Paulo where São Paulo indicates a higher salary than the average in segments such as Services for Companies, Construction, Commerce and Other Services. Rio de Janeiro on the other hand indicates a higher salary than São Paulo and the average in Education, Health, Public Administration and Industry.

Chart 20. Monthly average wage of the Southeast region



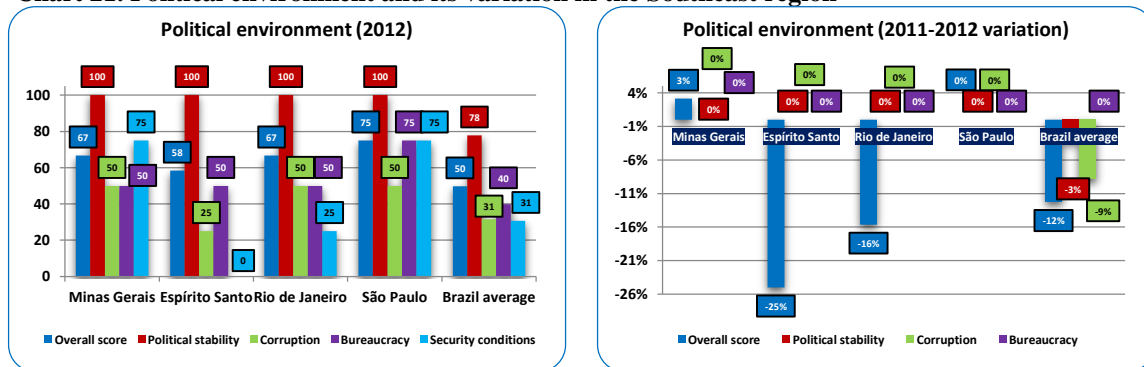
Source: IBGE

2.2.6.6 Political environment

The scoring of political environment of the region is a highly important factor for entering the market and managing the political risk. Four categories and the overall score were attributed to each state of the Southeast region and the average score of Brazil is included for the comparison with the rest of the country as indicates the chart 21. The variation that compares 2011 to 2012 is also taken into account in order to be aware of the evolution. The categories considered for this case are Political stability, Corruption, Bureaucracy and Security conditions. Political stability is measured by the stability of the executive power for each state and it is represented by the percentage of votes of the leading government obtained, the length of its presence in the mandate and its decisive power. Corruption and Bureaucracy create obstacles to do business and reduce the capacity of the government to release public programs, which lowers the socio economic development. Bureaucracy is measuring the capacity of the new policies approval

and application by institutions. Corruption is an old problem in Brazil and represents one of the principal weaknesses. Its measurement takes into account the number of corruption cases, the corruption prevention policies and the transparency. Other obstacles to overcome are the security conditions. They are measured by the proxy number of homicides per 100 000 inhabitants. The data available to assess the above category have been available since 2012. Therefore it is not considered in the comparison of the variation between 2011 and 2012.

Chart 21. Political environment and its variation in the Southeast region



Source: EIU

As for the scoring, the lower value, the worst case. By the analysis of the chart 21 all the states of Southeast region have higher overall score compared to the Brazilian average. The first place belongs to São Paulo with the overall score of 75 points, on the second place are Rio de Janeiro and Minas Gerais with 67 points and the lowest overall score has Espírito Santo with 58 points. Brazilian overall score is 50. The political stability achieved the highest level in all the states of Southeast region with the rank of 100 points where the average ranking of Brazil is 78. Corruption score is 31 points in average in Brazil. In the Southeast region corruption levels are below the average with 50 points in São Paulo, Rio de Janeiro and Minas Gerais. In Espírito Santo the corruption level is above the average with the score of only 25 points. As for the bureaucracy, the lowest levels has again São Paulo with 75 points, followed by all three states with 50 points where the average in Brazil is 40 points.

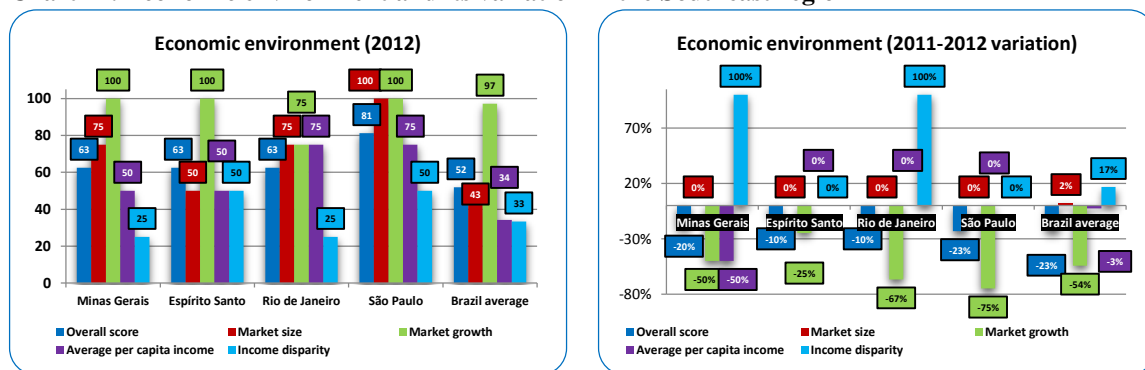
When analyzing the variation from the chart 21 it can be concluded that the overall score improved only in Minas Gerais. In São Paulo it stayed unchanged, in Espírito Santo worsened by 25% and in Rio de Janeiro worsened by 16%. As for the Brazilian average, the overall score worsened by 12%. Political stability stayed unchanged in the Southeast region but in Brazil worsened by 3%. Corruption as well does not showed any evolution in the region, in Brazil on

average worsened by 9%. As for bureaucracy, this stayed unchanged both in Southeast region and in Brazil.

2.2.6.7 Economic environment

This indicator evaluates the economic power of each state together with the wealth differences among its inhabitants. The economic environment takes into account four main categories, market size, the market growth, the average per capita income and the income disparity. The market size is measured by the GSP, where the highest score is attributed to the state with more than 500 billion of R\$ and the lower score to the state with less than 15 billion of R\$. The market growth is represented by the percentage difference between the GSP of the existing and previous year where whether it is more than 5% the state gets the highest rank and less than 2% is the lowest rank. The average income per capita is represented by its annual value where the most points gets the state with more than 21 000 R\$ and no points are attributed to the state with less than 12 000 R\$. Income disparity is presented by Gini coefficient where the highest score gets the state with Gini coefficient lower than 30 and the lowest score the state with Gini coefficient higher than 60. Gini coefficient represents the level of inequality between the salaries, the value 100 is the absolute inequality where 0 means absolute equality.

Chart 22. Economic environment and its variation in the Southeast region



Source: EIU

The chart 22 indicates the ranking in the categories of Economic environment for the Southeast region and also for the Brazilian average. In the overall score leads São Paulo with 81 points, followed by the rest of the states with the score of 63. In this category all states are above the average of Brazil. The Market size obtained again the highest ranking in São Paulo because São Paulo by itself represents almost one third of the Brazilian GDP. The second

position is being occupied by Rio de Janeiro and Minas Gerais with 75 points and the last place is occupied by Espírito Santo with 50 points. Again all states are above the average. As for the Market growth, the average ranking is of 97 points and all states of the Southeast region with the exception of Rio de Janeiro grew more than 5% therefore obtained 100 points. Rio de Janeiro has the ranking of 75 points. The average per capita income on average was ranked with 34 points where the highest score is in São Paulo and Rio de Janeiro with 75 points and mediocre with 50 points in Minas Gerais and Espírito Santo. The income disparity is highest in Minas Gerais and Rio de Janeiro with 25 points and mediocre with 50 points in São Paulo and Espírito Santo. The average score in this category is 33 points.

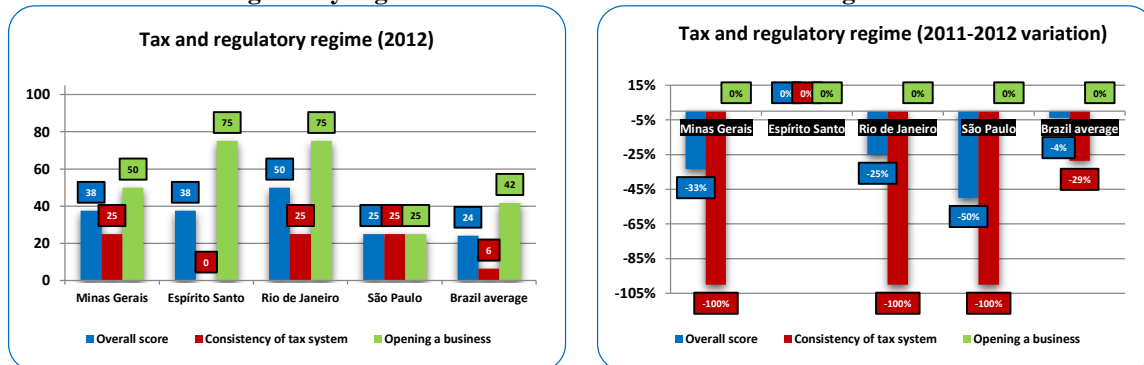
Looking at the chart 22, it can be noticed that in the category of overall score all states of the Southeast region worsened. In the category of Market size there has been no change. The market growth decelerated in São Paulo by lowering the ranking by 75%, Rio de Janeiro by 67%, Minas Gerais by 50% and Espírito Santo by 25%. The average per capita income worsened only in Minas Gerais by 50%. The income disparity improved in Minas Gerais and Rio de Janeiro by 100%. Taking into consideration the average situation of economic indicators in Brazil the overall score worsened by 23%, the Market size improved by 2%, Market growth decelerated by 54%, Average per capita income decreased by 3% and the Income disparity improved by 17%.

2.2.6.8 Tax and regulatory regime

Tax and regulatory systems plays crucial role and its complexity represents the principal drawback for the business. The principal tax paid in Brazil is the tax for circulation of goods and services, this tax is also an important instrument for the capturing of investment, because it can be deduced under the established conditions which vary state by state (AICEP, 2013). There are two categories considered when constructing this indicator, the first is Consistency of tax system and the second is the Time for opening business. The Consistency of the tax system is measured by the proxy which is the number of tax norms issued monthly and the average monthly change in the tax norms per year where more norms issued indicate higher instability. The maximum ranking have the most stable and clean tax system and the minimum ranking the most unstable and complex tax system. Opening a business category counts the average number of days needed to open business. The maximum ranking means that a new business can be opened in less than 10 days and the minimum 30 days or more. There have

been many improvements over the year in this category where the main improvement is the possibility to open business on-line which accelerates immensely the process, so hopefully in 2013 the ranking will improve.

Chart 23. Tax and regulatory regime and its variation in the Southeast region



Source: EIU

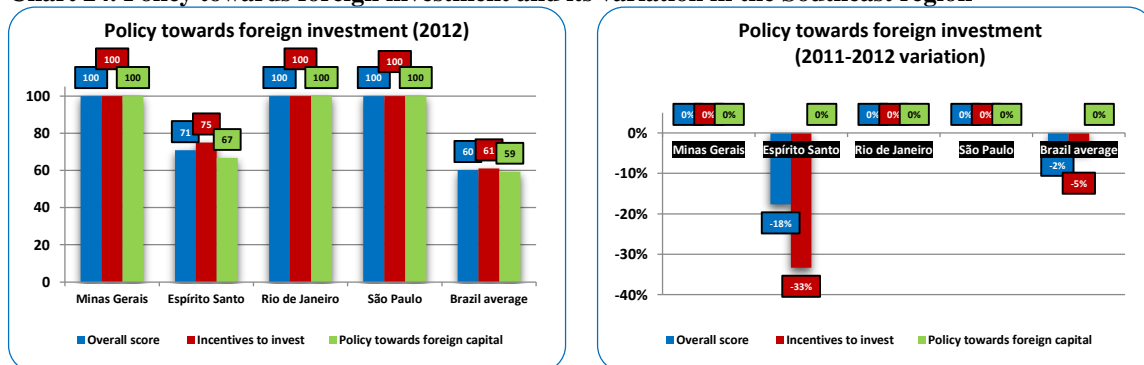
The final results from each category in the Southeast region together with the variation from 2011 to 2012 are reflected in the chart 23. Considering the overall score, the most efficient tax regime in compared states is in Rio de Janeiro with the ranking of 50 points, on second place are Espírito Santo and Minas Gerais with 38 points and last place took São Paulo. The average score for Brazil are 24 points. As for the Consistency of tax system, Minas Gerais with São Paulo and Rio de Janeiro occupy the same position with 25 points, Espírito Santo obtained 0 point with really low tax consistency. The average in Brazil in this category is 6 points. This reflects the weaknesses in bureaucracy and high inconsistency in tax system. Opening business takes less time in Rio de Janeiro and Espírito Santo, takes more in Minas Gerais and even more in São Paulo. The Brazilian average in this category is 42 points which appoints to around 15 days.

As for the evolution of each category. The only state without a change in any of the categories was Espírito Santo. The overall score worsened by 33% in Minas Gerais, by 25% in Rio de Janeiro, by 50% in São Paulo and by 4% in Brazil on average. The consistency of tax system shows a negative change in Minas Gerais, Rio de Janeiro and São Paulo by 100% and in Brazil in average by 29%. In opening business category there was no change in the observed period.

2.2.6.9 Policy towards the foreign investment

The quality of the policy towards FDI is closely related to the quality of the investment-promotion agencies of each state. Good environment that incentives the FDI improves the prospects for the healthy employment, economic stability and economic growth therefore this indicator is important for the future of each state. For the assessment of the quality of policy toward FDI two categories were used Incentive to invest and Policy towards foreign capital. The first category evaluates the scale and scope of incentives for investment including taxes and financial assistance of the state. The high ranking belongs to the state with very large number of incentives, elevated level of tax breaks and consistent financial assistance. The lowest level belongs to the state with very limited incentives. The Policy toward foreign capital assesses the presence and the quality of investment promotion agencies in terms of the sophistication of the agency, its promotion strategy and relationship with Brazilian National Promotional Agency, APEX. There are four levels defined, the highly encouraging to FDI, encouraging to FDI, with some efforts and with few or no efforts to encourage the FDI.

Chart 24. Policy towards foreign investment and its variation in the Southeast region



Source: EIU

By analyzing the chart 24 it can be concluded that the overall policy toward FDI achieved the highest scores in Minas Gerais, Rio de Janeiro and São Paulo, where the overall ranking and the ranking of each category is 100 points. Lower ranking was obtained in Minas Gerais which gained 71 points in overall score, 75 points in the category Incentive for investment and 67 points in the category Policy toward foreign capital. All the states are above the average scoring in all categories where the average ranking was 60 points in overall score, 61 points in Incentive to investment and 59 points in Policies toward the foreign capital.

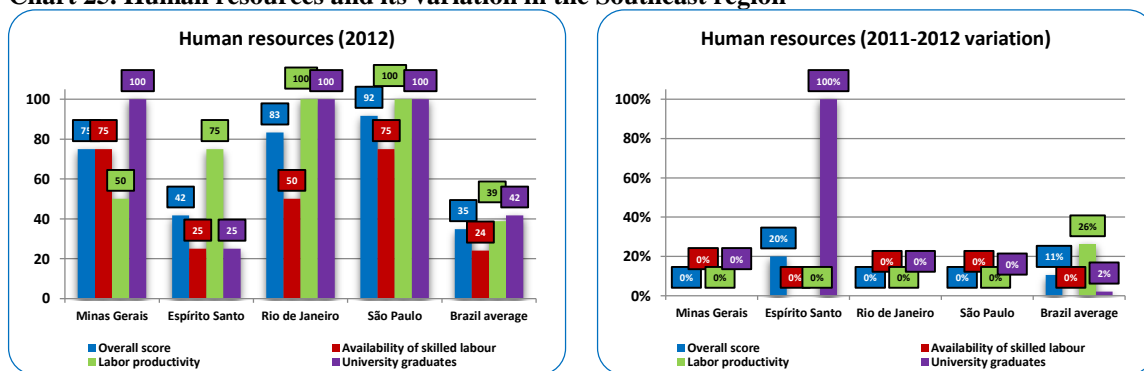
As for the variation of 2011 to 2012 it can be deduced that Espírito Santo was the only state with a negative development. In the category of Overall score the drop of 18% took place and

in the category of Incentives to invest the drop of 33% occurred. The Brazilian average got worse in the overall score by 2% and in the category of Incentive to invest by 5%.

2.2.6.10 Human resources

The lack of skilled and educated workers is another challenge of Brazil and many companies invest in the training of their workers huge amount of resources. There are continuously applied various politics to improve the skills and education in the main areas. For instance the federal government launched the National Program to Access to Technical Education and Employment, PRONATEC with the effort to offer technological education and improve the competitiveness of individuals in all states. Human resources are measured by the following categories, Availability of skilled labor, Labor productivity and University graduates. The first category, Availability of skilled labor is being assessed using the information of Ministry of Labor, MTE and Institute for Applied Economic Research, IPEA where the highest score gets the state with very good availability and lowest score the state with limited availability. Labor productivity is a category with a quantitative assessment where the data from the IBGE were used. The criteria was a Gross State Product, GSP produced by an employed adult where if the GSP is greater than R\$ 50 000 the state gets the highest score. The category of University graduates takes into account the number of graduates students from private and public institutions for higher education where 50 000 or more graduates represent the highest score.

Chart 25. Human resources and its variation in the Southeast region



Source: EIU

The comparison of each category is in the chart 25, the best overall score of the quality in terms of skills and education in the Southeast region belongs to São Paulo with the rating of 92 points, the second place occupies Rio de Janeiro with 83 points, the third Minas Gerais with 75 points and the last Espírito Santo with 42 points. The average of Brazil is 35 points and

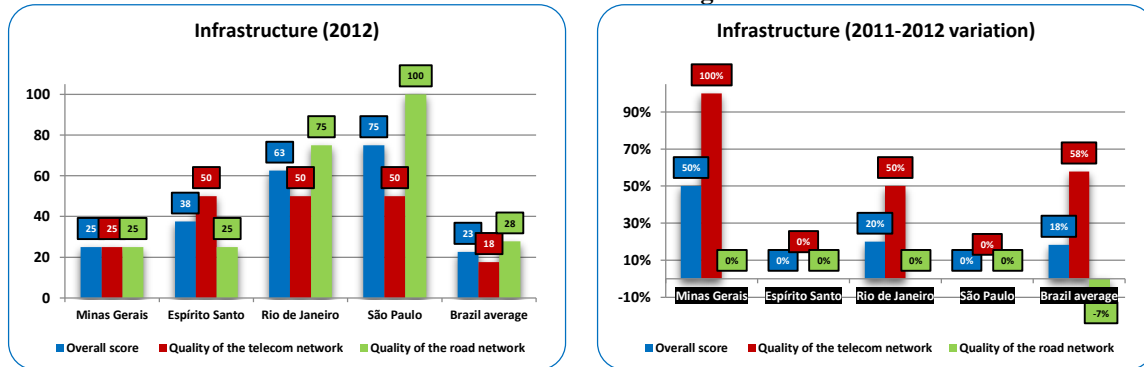
therefore all states are above the average. The highest availability of skilled workers is in São Paulo and Minas Gerais, followed by Rio de Janeiro and Espírito Santo. Again all states are above the average. Labour productivity is the highest in Rio de Janeiro and São Paulo with 100 points obtained. In Espírito Santo the score is of 75 points and in Minas Gerais of 50 points. Brazilian average is 39 points. As for the number of university graduates São Paulo, Rio de Janeiro and Minas Gerais are with the highest score of 100 points and Espírito Santo with 25 points. The average in Brazil is 42 points.

The variation indicates that there were not any changes between 2011 and 2012 in Minas Gerais, Rio de Janeiro and São Paulo. In Espírito Santo the overall score improved by 20% and the rank of the category of University graduates improved by 100%. The Brazilian average improved in overall score by 11%, in the Labor productivity by 26% and in the University graduates by 2%.

2.2.6.11 Infrastructure

The quality of the infrastructure, mainly the quality of telecom network and roads is directly correlated with the operational costs in the business environment because among the most important factors for a company is to maintain low costs of telecommunication and reduce the distance to the target clients and target market. For these reasons the quality of telecommunication network and roads were considered for the assessment. The quality of telecommunication network was measured by the level of the development of mobile, and land lane, both telephone and internet. It is based on the number of clients for each state and the number of radio transmitters for mobile devices installed in each state where as the main source of information the National Agency of Telecommunications, ANATEL served. The road quality reflects the up to date state of the roads for each state, where the assessment is based on the annual inspection data from the National Transport Confederation, CNT.

Chart 26. Infrastructure and its variation in the Southeast region



Source: EIU

In the chart 26 the overall score and the score of each individual category is interpreted graphically. The state with the highest overall score is São Paulo, followed by Rio de Janeiro, Espírito Santo and Minas Gerais. Each state of the Southeast region has a higher rank than the Brazilian average. The quality of the telecom network obtained the same rank of 50 points for São Paulo, Rio de Janeiro and Espírito Santo. Minas Gerais need further improvement with the score of 25 points. Again in this category the ranking was higher than the average. As for the quality of the road network, São Paulo gained 100 points, followed by Rio de Janeiro with 75 points, Espírito Santo and Minas Gerais with 25 points. The average in this category is 28 points.

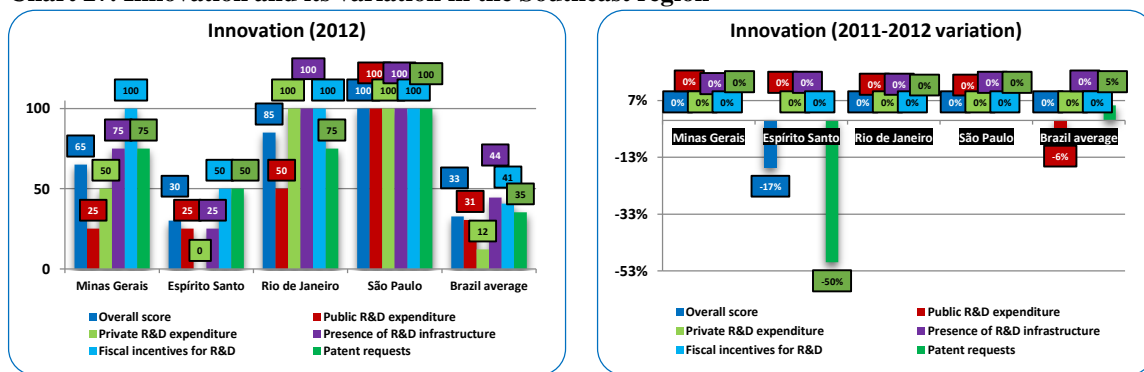
From the evolution of the quality of the infrastructure can be noticed that there has been a significant improvement in the quality of telecom networks in Minas Gerais and in Rio de Janeiro which was reflected in the overall score. There haven't been any changes in the Quality of road networks observed in the period. Brazil in average improved because the quality of the telecom network increased by 58% on the other hand the road quality worsened by 7%.

2.2.6.12 Innovation

Innovation is important for the future economic growth and for having a general idea of the dynamics of the competition. Therefore there is also attributed high importance to this indicator. There are five categories considered to measure this indicator Public R&D expenditure, Private R&D expenditure, Presence of R&D infrastructure, Fiscal incentives for R&D and Patent requests. The main source of information was the Ministry of Science,

Technology and Innovation, MCTI. Public R&D expenditure measures the R&D expenditure as a percentage of GSP where more than 0.3% is considered as highest ranking and 0.02% as lowest. Private R&D expenditure measures the R&D expenditure of private sector as a percentage of GSP of the region where more than 0.6% represents the highest score and 0.3% and less the lowest. It is clear that the private sector invest more funds in the innovation because it reinforces its competitive advantage. The presence of R&D infrastructure evaluates the quality of the R&D infrastructure. As the proxy serves the number of R&D private centers and R&D public centers, number of universities that participate actively on R&D and the number of individuals with a doctor degree in R&D in various fields. The Fiscal incentives for R&D category measures the quantity of fiscal incentives of private public entities where the laws about the incentives are published by the MCTI. Patent requests measures the number or patents required annually where the highest score gets to the state with more than 2000 requests annually where the data is given by the National Institute for Intellectual Property, INPI.

Chart 27. Innovation and its variation in the Southeast region



Source: EIU

The Southeast region is really strong in innovation as indicates the chart 27, São Paulo achieved 100 points in all categories. The second best overall score got Rio de Janeiro with 85 points, the third Minas Gerais with 65 points and in the last position is Espírito Santo with 30 points. Overall rank of innovation in Brazil is of 33 points. As for Public expenditures in R&D, Rio de Janeiro again took the second place with 50 points, followed by Espírito Santo and Minas Gerais with 25 points. Brazilian average in this category is 31 points. Private expenditures in R&D are strongest in São Paulo, as mentioned earlier and in Rio de Janeiro, both obtained 100 points in this category. Minas Gerais achieved a ranking of 50 points. In Espírito Santo the private R&D expenditure is the lowest with the score of 0 points. The average ranking in Brazil is 12 points. The presence of R&D infrastructures is high in São Paulo and Rio de Janeiro where both got the maximum ranking. In Minas Gerais it is also very

solid with the ranking of 75 points. Espírito Santo got again the lowest ranking with 25 points. The Brazilian average in this category is 44 points. As for the category of Fiscal incentives, Minas Gerais, São Paulo and Rio de Janeiro are on the first place with 100 points followed by Espírito Santo with 50 points. The average score in Brazil is 41 points in this category. Patent requests counts are the highest in São Paulo, high in Rio de Janeiro and Minas Gerais with 75 points and moderate in Espírito Santo with the rank of 50. All states exceed the 35 points of the Brazilian average.

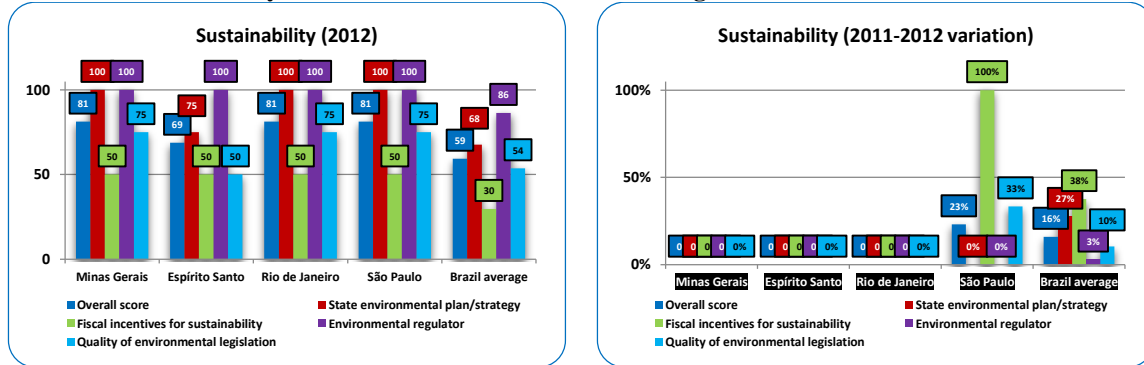
When analyzing the variation between 2011 and 2012 it can be noticed that the overall score of Espírito Santo worsened by 17% because the patent requests decreased losing 50% from the ranking. Brazil in average lost 6% in the category of Public R&D expenditure and improved by 5% in the category of Patent requests. The rest of the Southeast region didn't suffer any changes.

2.2.6.13 Sustainability

Sustainability is another important indicator because it measures the sensibility for the environment quality together with the resources protection and existing incentives. All this is important for the integration of renewable energy solutions. There are four categories taken into account in order to assess this indicator State environmental plan/strategy, Fiscal incentives for sustainability, Environmental regulator and Quality of environmental legislation. The State environmental plan/strategy evaluates the quality of the plans and environmental strategies, mainly by the number of intervention areas that are covered. The principal areas are the air quality, water quality, use of soil, biodiversity and the administration of forestry management. Fiscal incentives for sustainability measures what more the state is doing to incentive the sustainability more. Main incentives are VAT reduction and incentive for better waste treatment and storage. The Environmental regulator evaluates the number of institutions that establish and control the regulatory compliance application and the complexity of the means and processes. The main points to evaluate are institutional and legislative transparency, monitoring processes, fines giving and accessibility for a public in terms of communication of problems and issues. For instance, if the state organization clearly establishes the regulations legislatives and has defined control steps of their implementation together with a high transparency and measurement then the state gets the highest score. If the organization does not have such quality and transparency in terms of control process of implementation it is

penalized with a lower score. Next category Quality of environmental legislation assesses the quality of environmental legislation in terms of the presence of the comprising of 17 most important topics.

Chart 28. Sustainability and its variation in the Southeast region



Source: EIU

By analyzing the chart 28 it is clear that the overall score is the same in Minas Gerais, Rio de Janeiro and São Paulo with 81 points. Espírito Santo falls behind with 69 points and Brazilian overall score on average is 59 points. The State environmental plan/strategy is well developed in Minas Gerais, Rio de Janeiro and Espírito Santo with the score of 100 points and less well developed in Espírito Santo with 75 points. Average score of Brazil is of 68 points. Fiscal incentives for sustainability are mediocre in all states of the Southeast region with the score of 50 points where the average in Brazil is 30 points. The quality of institutions for regulation is excellent in the region with the score of 100 in all states. The average score in Brazil is of 86 points. The environmental legislation is well developed in Minas Gerais, São Paulo and Rio de Janeiro with 50 points achieved. In Minas Gerais the ranking in this category is 50 points and in Brazil on average 54 points.

As for the evolution between 2011 and 2012. São Paulo was the only state that showed some changes in the measured period, the rest stayed the same in all categories. The ranking of Fiscal incentives in São Paulo improved by 100% and also the Quality of environmental legislation showed an improvement of 33%. Because of these two categories, the overall improvement of São Paulo was 23%. As for Brazil it improved on average in all categories. The overall score increased by 16%, State environmental plan/strategy by 27%, Fiscal incentives by 38%, Environment regulator by 3% and Quality of environmental legislation by 10%.

2.3 Entry strategy

There were three international strategies initially considered for entering the Brazilian market, exportation, collaborative venture creation and FDI. Exportation is widely known as transactions of goods and services from home country to host country. The international collaborative venture is by its definition: “*Cross-border business alliance whereby partnering firms pool their resources and share costs and risks to undertake a new business venture; also referred to as an international partnership or an international strategic alliance*” and FDI stands for: “*An internationalization strategy in which the firm establishes a physical presence abroad through acquisition of productive assets such as capital, technology, labor, land, plant, and equipment.*” (Cavusgil *et al.*, 2012). Each strategy has many risks involved where in table 4 the level of each of the four risks of internationalization is shown. Exportation is the strategy with the lowest risk and FDI represents the highest risk. For this case the risks of the internationalization process of a specific company are taken into account, so the assumptions are not general. The cultural risk has a low impact in all cases because of the proximity of the Brazilian and the Portuguese culture.

Table 4. Risks of internationalization strategies

	Cultural risk	Country risk	Currency risk	Commercial risk	Overall risk
Exportation	low	low	Medium	low	low
Collaborative ventures	low	medium	High	medium	medium
FDI	low	high	Medium	medium	high

Source: My own assumptions for the specific case of internationalization of Qzero to Brazilian market

In case of exportation the overall risk is the lowest because there is almost no investment involved for starting the collaboration abroad. There can be assigned a limited contract agreement by both parties giving the exclusivity to the buying company for a specific period of time. In this case the impact of the country risk is also low, because the business partner assumes normally all costs before the material is sent and can be freely abandoned in case of high risk or bad reputation. The currency risk is medium because the price of outsourced products can be adjusted due to the fact that it is not fixed by any contract for any time period with the client. The currency instability can represent an entry barrier for the business and can lead to the end of the collaboration because of competitiveness issues. The commercial risk is also low because normally the supply chain is fully controlled by the home company and the

commercial strategy is left for the host country company, although bad selection of the partner can be prejudiced for the company brand and can lead to a bad reputation.

As for collaborative ventures, the overall risk is medium because of closer collaboration and higher involvement of the four risks of internationalization. Country risk is higher and can affect the home company more deeply as the home company is contractually fixed to the host company and higher investment is needed with the formation and the training of the human resources of the business partner. Another sensitive fact is that some important pieces of information are shared. Currency risk is higher too due to the possible existence of fixed prices for a specific period of time or sanctions when the contract conditions are not delivered. The commercial risk is medium because of the operational problems, poor contract protection and opportunity costs related to the wrong partner selection. Another factor that can cause damage to the company is the conflict of interests. The partner can start the collaboration with an intention to gain a specific knowledge in order to use it in the future for its own good and becomes a competitor. The collaborative venture can also lead to losing opportunity because the company could grow better without the collaborative venture by FDI or by using other entry strategies.

As for the FDI, this is the strategy with the highest overall risk involved. The impact of the country risk in this case is high because of the investment in physical presence in the host market. The currency risk on the other hand has more moderate impact because a lot of material and equipment could be supplied locally and the solutions can be sold locally or partly exported. The commercial risk is medium because the timing of entry should be carefully chosen and the business partners can be more closely observed, besides, many activities such as sales and after-sale services can be done with their own human resources. It is important to execute in debt the analysis of the specific market focusing on various factors, such as the human resources, the proximity of key partners and clients, infrastructures, the political and legal stability, taxes and payments, the bureaucracy and red tape and the economic factors such as the costs of land or the stability of the trade. In this case it is also important to assess the macroeconomic, political and social indicators of the country in order to get deeper knowledge of its problems and to foresee its development and its socio-economic stability.

The chosen entry strategy that will give higher competitive advantage is the FDI. This is due to the fact that the service in order to be correctly executed demands physical presence on the market and highly trained professionals. Also the installation is always being confirmed on the

site whether it matches with the project and all processes need a solid quality control and planning. Another advantage of this strategy is the proximity of key partners, supplies and clients. For instance, heating pumps, ventilation systems, ducts and other parts can be both locally overcoming the high importation taxes, bureaucracies and waiting times gaining more flexibility and delivering the final solution to the client more quickly. The communication with key business partners and clients is also facilitated by the physical presence in the meetings which brings more credibility for the company and better prospects for the future.

After choosing the entry strategy it is necessary to select the target region and state. The main criteria for the target region selection were the GDP, GPD per capita, the quality of the infrastructures and political stability. Therefore the southeast regions were selected and after that all four states were evaluated according to the entry strategy chosen and as a result, São Paulo was selected as the entry state.

2.4 Indicators analysis in terms of internationalization risks and company strategy

2.4.1 Cultural risk

As mentioned earlier, the cultural risk of Brazil is low in this particular case because both Portugal and Brazil share the same language and basic cultural values, characteristics and beliefs. Considering the five Hofstede's dimensions it can be concluded that almost in all categories Brazil and Portugal obtained relatively close rankings. The Brazilian population respects the power distance in the same way like the Portuguese population accepting hierarchical inequalities in the society. The society is a little bit more united and supportive because there are some differences in the ranking of Masculinity and femininity and Individualism. As for Uncertainty avoidance the difference is considerably higher because Brazilian people are more sensible for uncertainty. This sensibility can lead to a higher bureaucracy, more detailed contracts and time consuming procedures. Another category where there is a considerable difference between Brazil and Portugal is the Long-term orientation where Brazil obtained a much higher score. This means that Brazilian people are more focused on the future adapting its values and plans more far ahead. It is important to get acquainted with the Brazilian cultural codex in order to avoid an unpleasant situation both in business and in common life. The Brazilian cultural risk has not a significant weight for the selection of the internationalization strategy of Qzero energy buildings and does not represent a considerable thread.

2.4.2 Country risk

2.4.2.1 Economic indicators

The GDP and the GDP per capita are the main economic indicators for the economic development and economic growth as they represent the overall productivity in terms of goods and services and the overall productivity per person respectively. The GDP shows a constant growth over the years with its peak in 2011 where it achieved around 2.476 billion of US\$. When compared to its neighbors in Latin America, Brazil is far ahead with the highest GDP. The GDP and GDP per capita average annual growth in the last 10 years represent the average levels in Latin America. It can be concluded that in terms of the economic development, Brazil can be called the engine of Latin America. The GDP growth in civil construction segment was observed as well in order to assess the dynamics of civil construction growth and to discover its connection to the evolution of Brazilian GDP and because civil construction industry is closely related to the core business of Qzero Energy Building. It was discovered that both indicators follow the same patterns since the beginning of the law implementation about the interest rates for real estate operations. For the company and for the FDI it is important to target the region with the highest economic potential. As the main indicator for this purpose the GDP per capita was used, and it was discovered that the Southeast region's GDP per capita represents the 48% of the sum of all region, so it can be concluded that this region is the strongest one in terms of economy. When we focus on the comparison over a specific time period among the states of this region, Rio de Janeiro and São Paulo are the leaders. Other important indicators for measuring the potential of the market in Southeast Region are the market size and the market growth. The Market size was measured by the proxy GSP which was the highest again in São Paulo, followed by Rio de Janeiro and Minas Gerais. Market growth was ranked by GSP variation. Surprisingly the market growth was medium in São Paulo, Espírito Santo and Minas Gerais achieving the Brazilian average where lower than the average market growth was in Rio de Janeiro.

The Inflation is another indicator of the Country risk because it is closely related to the monetary policy implementation, price regulation and the effectiveness of the inflation targeting regime. The closer the inflation to its target, the better the inflation targeting regime works. Also with high instability of the inflation the consumers lose credibility and tend to have lower incentives to invest and less money left. It can be concluded that since 2005 the inflation levels have been close to its targets lowering the risk and improving the confidence in

the applied policies. For the company and for the entering strategy the inflation is an important factor with a significant impact on the final product pricing and overall profit. Whenever the cost of used materials, utilities and products of suppliers increase the company shrinks its commercial margin where the same rule is applied to the subcontracted services. The price is defined in the contract with the client for a specific period of time such as one year, and after this period it can be updated according to the new costs of material, operational costs and the costs of subcontracting. Regulated prices such as electricity, gasoline and telecommunications together with the transportation and distribution costs are to be closely observed because they are one of the instruments used to target the inflation to desired levels and have a significant impact on the company competitiveness.

Unemployment which is the amount of individuals willing to work without a job in the moment is another macroeconomic indicator that is highly important for the measurement of economic active population and the stability of the country. The unemployment rate in Brazil is measured in the six main metropolitan areas and does not fully reflect the overall employment in the country. On the other hand taking into consideration that more than 85% of all Brazilian population live in these metropolises, it is an accurate indicator to be used. As the unemployment significantly improved over the years and with various governmental initiatives and programs where the PAC is one of the most important together with the World Cup and the Olympic Games there are positive prospects for the future.

The monthly average wage in the Southeast region was observed in order to identify which sector has highest wages because some of the offered HVAC systems are more expensive and are more suitable for the clients with higher economic freedom and others are suitable for the middle class. From the average wage balance comparison for each state in the Southeast region can be concluded that the richest sectors are education, health industry and the public administration together with the industry and services for companies. The middle income sectors are the construction sector and the commerce and the low income sector is the sector of housekeeping services. The average per capita income is another indicator that was taken into account where its importance is mainly because it defines the degree of economic freedom in each state of the Southeast region. São Paulo and Rio de Janeiro are the states with the highest average per capita income followed by Minas Gerais and Espírito Santo.

Another considered indicator is the Real exchange rate because it is important for the entering strategy of the company as it represents the relative price of goods across the countries and

determines the attractiveness of the country for capturing investment. Its depreciation attracts FDI and is mostly important for the companies that are willing to settle production halls or local subsidiaries and to sell the final product on host market in order to be closer to the client and improve the overall company's management control. Considering the evolution of the real exchange rate over the time period and that the Brazilian productivity will grow, the real exchange rate could appreciate slowing down the FDI growth.

Interest rate is another factor when founding a company in Brazil. It is both important for the FDI as entering strategy and credit conditions. Low interest rate is more favorable for the local companies that offer services competing on the local market and have therefore the access to cheaper financing. The FDI on the other hand is more viable when the interest rate is higher because the money invested in a project will bring more interest in the future. Interest rate has an increasing tendency since 2009 and because of the government programs, the Olympic Games and the World Cup it can be forecasted that it will continue to grow attracting the FDI and slightly worsen the soil for local financing.

Another important indicator that reflex the quality of the governmental decisions and macroeconomic policies is the Current account balance which is by its definition the sum of the Trade balance, money transfers and the money gained from the FDI minus the money paid to the foreign investors. The Balance of trade can be defined as importation minus exportation. The Current account balance was positive since 2003 until 2007 because the Balance of trade together with cash transfers achieved higher values than the FDI from abroad. The current account balance continues to grow to negative values since 2008 and the Balance of trade is fluctuating. More money inflows can be awaited because of the Brazilian development programs. The current account balance could recuperate in long-term because of the protectionism by applying the high importation taxes and improving the ports, highways and railways infrastructures. In short term, when Brazil attracts more FDI, the Current balance account will continue to decrease more to negative values. All this reveals that Brazil has a high potential for the business development and favorable conditions for the FDI or entering by founding new companies in long term.

The Public debt management is another indicator of the Country risk that normally belongs to the category of Financial risk and its evolution expresses whether the country can pay its obligations or not. It can be observed that the public debt has decreasing tendency over the last

decade. It achieved in 2013 the value of 35.1% of GDP. All this reflects the good quality of macroeconomic policies and good public debt management.

Consumption together with the credit accessibility is an important factor for understanding how much the government and the households invest to acquisition of new goods and services. For the company it is specifically important to know how many households and commercial buildings were constructed and acquired by credit financing and what the overall amount available was in the target region because the construction sector is closely related to the HVAC solution applied. It is important to distinguish between new construction and the acquisition of the exiting one because there are different solutions for each category. The consumption in Brazil is showing increasing tendency both for the households and for the government in all states of Brazil. As for loans, São Paulo is the state where in 2012 almost 70% of the buildings were constructed and acquired with the financing by SBPE followed by Rio de Janeiro with around 16% of acquisitions and constructions. The third place belongs to Minas Gerais with 12%. As for the total amount, in São Paulo under this financing 35.54 billion of R\$ were allocated for this purpose which in the regional count stands for 65%. Again in the second place is Rio de Janeiro with 18% of the total value attributed and is the third are Minas Gerais with 14%. As for another source of financing, the FGTS, São Paulo again leads in terms of total acquisitions and the overall value invested, followed by Minas Gerais and Rio de Janeiro. From these results it can be concluded that the highest potential in terms of the credit accessibility and the amount of constructed and acquired units is in São Paulo.

As for the other indicators, the concentration of construction of buildings and the concentration of engineering and architecture services in the Southeast region were used because it is important to measure where the highest activity of the construction of new buildings is and where the most strategic business partners to offer the company's services are. In both categories São Paulo is the leader with 52.3% of new buildings constructed and the presence of 49.6% engineers and architects. In Minas Gerais 26.9% of the new buildings were constructed and 22.4% of the architects and engineers were concentrated. Rio de Janeiro had 14.4% new buildings constructed and the concentration of 25.6% architects and engineers. In terms of new construction and the presence of key business partners São Paulo and Rio de Janeiro can be considered as the strategic states. Specialization is another indicator used for clarifying the distribution of target industries in a specific state. The building industry has more percentage weight in Espírito Santo, followed by Minas Gerais and São Paulo. The percentage

weight of engineering and architecture services is the highest in Rio de Janeiro followed by Minas Gerais and São Paulo.

2.4.2.2 Political and legal environment indicators

Country risk is represented mostly by the political and legal environment quality and for its assessment various indicators were considered as the business credibility indicators, the political stability, corruption, bureaucracy, the tax policies and the policies toward FDI, innovation and sustainability. These indicators are highly important for the selected entry strategy.

As for the bureaucracy from the World Bank ranking can be concluded that Brazil is a country with not very favorable conditions because there are bureaucratic difficulties with negative impact on the time and cost of starting business, dealing with construction permits, registration property and getting electricity. The bureaucracy is slowing down all processes such as the material supply, licensing, hand labor and is causing organizational problems. Considering now the Southeast region, bureaucracy is more flexible in São Paulo, followed by the rest of the states in this region where each state is above the average in Brazil. Political stability is very high in the Southeast region because all states got the highest score. Corruption continues to be an issue especially in Espírito Santo where it is much higher compared to the Brazilian average. São Paulo, Rio de Janeiro and Minas Gerais did not achieve the highest ranking but the situation is better than the average. Another indicator of a high importance is the consistency of the tax system because the less consistent, the more time is spent to study the new legislation and the more money is spent with the workers formation, certificates, trainings and the documentation needed for specific tasks. The consistency of the tax system is very low in all states appointing to creating and updating the tax norms too often, which is a drawback for the business. Another indicator was the Policy toward FDI which assesses the quality of the agencies for FDI promotion and transparency of the information together with the incentives for the investment. These policies are important to improve the economic development and the employment. The Southeast region has the highest quality of Policy toward FDI with the exception of Espírito Santo which is just above the Brazilian average. To open new business takes less time in Rio de Janeiro and Espírito Santo and a lot of time in São Paulo. Another category included in this study are policies toward innovation and sustainability. As for the innovation, this indicator is important to track the sensibility for new solutions in the region

and to assess the competition and the quality of the protection of the intellectual property. The highest innovation is in São Paulo followed by Rio de Janeiro and Minas Gerais. Public and private sectors invest more financial assets into innovation in São Paulo and Rio de Janeiro where the fact that public sector is spending more in these two states shows that the competition is strong in this field. Other actors important for the company and its competitiveness are the fiscal incentives for innovation which are the highest in Rio de Janeiro, São Paulo and Minas Gerais and the number of patent request which shows the final outcome of innovation. Most patents were requested in São Paulo followed by Rio de Janeiro and Minas Gerais. Another category to measure is the sustainability because the higher sustainability sensitivity means higher sensibility for the environmentally friendly solutions. The incentives for sustainability and the quality of legislation and monitoring process were also measured in order to evaluate whether the municipality has a solid plan and whether the plan is followed and controlled. The sensitivity for sustainability is high in all regions and all regions offer reasonable incentives. As for the strategy and legislation quality both indicators are the highest in São Paulo followed by Rio de Janeiro and Minas Gerais. The incentives are mediocre in the whole region and the follow up and monitoring processes are consistent in all states.

2.4.2.3 Infrastructures

The quality of infrastructures is highly connected to the economic and social development and willingness for the foreign companies to invest. Therefore the infrastructures are included in the country risk under the category of the structure risk. The problem with the overall quality of Brazilian infrastructures is widely known and the qualitative and quantitative reinforcement of ports, airports, railways and highways is needed. Bad overall quality of infrastructures and time consuming bureaucracy procedures lead to a significant increase in the transportation costs and can represent the entry barrier for entering the market. On the other hand, the situation has been improving since 2007 because of the introduction of the PAC where significant improvements have already taken place.

As for the infrastructures in the Southeast region, which is the chosen strategic region for the company, the overall quality in all four states is above the average with important ports in Rio de Janeiro and Santos where Santos is responsible for 28% of the Brazilian foreign trade. The highway structure in this region is also being improved where there are four concessions to be awarded. The current railway network is also being reinforced and the hi-speed train is foreseen

to be constructed in 2014 connecting Rio de Janeiro, São Paulo and Campinas. As for the aviation infrastructure, the operational problems and lack of capacity are being solved by the works under PAC program, the concession for Galeão in Rio de Janeiro and Cofins in Belo Horizonte are already awarded and Campinas and Guarulhos in São Paulo are to be awarded. São Paulo is the leading state with the highest aviation traffic in this region. All these findings together secure that there will be good soil for a high development in this region and conditions where better infrastructures normally follow more construction of buildings and households. Special attention must be taken when establishing transport costs. Normally, it can take days to a few months to transport a product to a final customer if supplied from abroad. Other costs that must be taken into account are the bureaucracy costs and the taxes connected to importation and the custom clearance of goods. As for the infrastructures important for a local business operation and for collaborative ventures and FDI, the most important are the road quality and the telecommunication network quality. The road quality also determines indirectly the responsiveness and distance to a client because with consistent roads it is easier, faster and cheaper to travel. The telecommunication networks quality determines the operational and communication costs and has a significant impact on the productivity. Therefore the state with better infrastructures is more competitive. As for the target region, São Paulo has better road and telecommunication networks quality followed by Rio de Janeiro and Espírito Santo.

2.4.2.4 Poverty and social indicators

Poverty and social indicators also play an important role in the country risk assessment. As showed in the macroeconomic analysis, in 2011 the population counted 196.7 million where the population growth slowly decreased, and since 2008 stabilizes on the value of around 0.9% which is appointing to more stable pattern for the population growth. Interesting fact is that in 2011 over 85% of the population lived in the six main metropolises, therefore the primary market is appointing to these areas. The literacy in 2011 was around 90%, which is below the average for Latin America, and the percentage of the population below the national poverty line was 1.5%. For assessing the equality among population, the HDI and its development over the last decade was incorporated into this study and it was observed that the HDI increased over the years although there is a space for further improvement because Brazil took the 85th place from 187 compared countries by the United Nations.

As for the Southeast Region, the income disparity category was included to assess which is the most problematic state in the region. Minas Gerais and Espírito Santo showed to be the states with the highest income disparity and Rio de Janeiro and São Paulo the lowest from the region. The income disparity of Brazil on average showed to be higher than in any state of the Southeast region. It can also be concluded that the more developed region the lower the disparity. São Paulo and Rio de Janeiro are the states where the disparity is more favorable to do business in the Southeast region. Another indicator that was examined in the region was the quality of the human resources where following subcategories were taken into consideration the presence of university graduates, the labor productivity and the working skills. São Paulo and Rio de Janeiro have the same score in the subcategory of labor productivity and the number of university graduates where São Paulo and Minas Gerais have the highest score in the availability of skilled workers. This concludes that São Paulo is the state with the highest productivity, educated and skilled workers in the target region. This is an important finding for the company, because Qzero Energy Building works both with the qualified partners as engineers and architects and with skill labor such as the installation companies. Another important indicator are the security conditions in the states of the target region as they are important both for human resources of the company and the material storage. The low security leads to a higher theft probability and more investment is the site vigilance and the security measures. The security conditions are low in Brazil and continue to be an important issue. As for the states of the Southeast region the security is far above the average in Minas Gerais and São Paulo, low in Rio de Janeiro and very low in Espírito Santo.

2.4.3 Currency risk

The currency risk is related to the nominal exchange rate and its variation because it directly determines the profit gained in international transactions and its sharp variation can represent significant losses for the company willing to enter the market that has the headquarters abroad or importing services or material. In case of building new subsidiary by FDI and supplying the equipment locally, the currency risk can be lower. On the other hand, when the supplier buys components abroad and the Brazilian nominal exchange rate depreciates, the supplier in order not to lose money will rise the price. Therefore the impact also influences competitiveness of Qzero Energy Building which can lose money in case the price is fixed with the final client for a certain period of time. Taking into account the evolution over the years and the fact that

employment and interest rate are increasing and that there are favorable prospects in terms of exportation, it can be expected that the nominal exchange rate will continue to appreciate but its stability over the last years inclusively with high money inflows by FDI indicates good monetary policies and good soil for future investing.

3. CONCLUSIONS

The main objective of this thesis apart from the theoretical revision of the four international risks and their impact on the internationalization process is to create a solid case study of specific Portuguese SME entering the Brazilian market. This work is applying pragmatic approach during the analysis taking into consideration wide variety of micro and macroeconomic indicators which are important for the assessment of Cultural risk, Country risk and Currency risk and for the assessment of the market potential considering the up-to-date company's business strategy. As a result of the analysis, the most appropriate entering strategy is selected together with the target region and state.

The company selected for this case study is competing on the market of energy efficiency under the commercial designation Qzero Energy Building and offers high variety of HVAC solutions which can be applied both to households and large commercial and office buildings. As for the services, the company integrates in its offer the proposal and the project conception, the installation execution and the after sale services providing a long lasting warranty and being responsible for the maintenance and other support. The current business strategy of Qzero Energy Building is to use five channels in order to gain new clients and capture new business opportunities. The first channel is represented by approaching the architect and engineers who are responsible for new projects and can offer the HVAC solutions to the final client. The second channel is represented by the installation companies that know well the provided HVAC solutions. Other channels are the construction companies which normally follow specific project but tend to deviate and integrate cheaper HVAC systems or systems that give them higher financial benefit. The fourth channel is represented by intermediaries and existing clients that can recommend the solutions to their friends and acquaintances. The last channel is represented by approaching new clients. Because of the current business strategy the following indicators are considered for the assessment of the target market, the presence of the potential clients and their economic freedom, the presence of the architects and engineers, the availability of skilled and labor workers, the growth of the segment of civil construction, the credit accessibility and the number of build houses and commercial building.

Brazilian republic was selected as the target country to enter and the four risks of internationalization were tested. As for the Cultural risk, it has a low impact on the internationalization process because of the cultural proximity of Portugal and Brazil and because they share the same language and most of the habits. The Country risk rating improved

a lot over the last decade and was considered to be low because of good economic and political stability of the country, solid policies to attract FDI, the improvement of infrastructures, the improvement of the HDI index and the stable real exchange rate evolution. Brazil still faces many challenges such as corruption and bureaucracy, inconsistency of tax system, lack of skilled workers and university graduates, low infrastructure quality and security problems. The findings regarding the Country risk and its evolution were verified by various studies, such as the rating of OECD (2013) and the AMB Country risk report (2013). As for the Currency risk, low variation of the nominal exchange rate over the last years together with its stability even with a high capital inflow from FDI are the main reasons to consider low rating in this category. Commercial risk is not so important for this work, although it is important to take into consideration some of its characteristics like for example choosing the correct business partners, selecting the appropriate entry and marketing strategy and foreseeing the operational problems that can occur.

As the entry strategy, FDI was selected because the physical presence in the target market gives the company many advantages such as the proximity to the key partners and clients, better control and management of resources and the possibility of local sourcing of material and services. It also diminishes the negative impact of bureaucracy procedures offering some flexibility when resolving the legal issues. On the other hand this strategy represents the highest sensibility in terms of the four risk of internationalization and in terms of the factors related to the current company business strategy. As for the indicators important for FDI as the entering strategy, the Political environment, the Economic environment, the Tax and regulatory regime, the Policy toward FDI, the Human resources, the Infrastructure and the Innovation and Sustainability were included in the analysis.

The Southeast region was considered as the target region for the company because it is the region with the highest GDP, highest political and economic stability and good quality of infrastructures. The selected state for entering by FDI is São Paulo mostly because of its economic and political stability, highest market size and market growth, good infrastructures quality and incentives for FDI, sustainability and innovation. It is responsible for almost one third of the Brazilian GDP and offers a solid credit accessibility for the construction and acquisition of new and existing buildings, has higher concentration of the construction of new households and commercial buildings and more engineering and architecture offices which are operating in this state. São Paulo offers the best human resources both skilled labor and

university graduates and good security conditions. It has the highest average per capita income where the main potential clients belong to the sectors of education, public administration and services for companies because the employees in these sectors gain higher wages and therefore have higher economic freedom and easier credit accessibility. São Paulo has naturally many challenges to overcome too because corruption is quite high, telecom network and infrastructures still can be improved and the consistency of tax system and some bureaucratic procedures such as the procedures needed for opening and running business still lack of flexibility.

As for the future of the Brazilian country three possible scenarios can be taken into consideration, the first is the scenario of a higher economic growth than expected, the second is that Brazil will maintain the current tendencies and the third is considering an increase of sociopolitical tension and the slowdown of the economic growth and sustainability. Taking into account the macroeconomic development and the improvement of the infrastructures mostly by external financing, further improvement in education, life quality and consumption should be expected. Unemployment is decreasing and inflation is close to its targets showing a good monetary policy and price regulation policies. The positive policy toward FDI, good quality of the promotion agencies, PAC and the Olympic Games together with the World Cup and the Expo 2020 are further improving the prospects for the employment and the economic growth. Positive Balance of trade because of applying protectionism on the importations and reinforcing the export policies helps to offset the negative Current account balance. Public debt is continuously decreasing in terms of GDP showing good debt control policies. From the above mentioned findings it can be concluded, that in spite of its socioeconomic problems Brazil will most probably maintain its current economic development and GDP growth and therefore it will continue to be an attractive market to invest in.

REFERENCES

1. Abel, B. A., Bernanke, B. S., & Croushore, D. 2008. *Macroeconomics sixth edition*. Boston: Pearson Education, Inc.
2. Abraha, D. 2004. *Command economy as failed model of development: Lessons not yet learned the case of Eritrea*. Working paper presented at the Thirteenth World Business Congress, Maastricht School of Management, Netherlands.
3. Acemoglu, D., Golosov, M., & Tsyvinski, A. 2007. *Markets versus governments*. Working paper prepared for the Carnegie-Rochester Conference Series on Public Policy.
4. Akerlof, G. A. 1970. The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3): 488-500.
5. Albizuri, N. S. M., & Rodríguez-Castellanos, A. 2012. Globalization and the unpredictability of crisis episodes: An empirical analysis of country risk indexes. *Investigaciones Europeas de Dirección y Economía de la Empresa*. 18:148-155.
6. A.M. Best, 2013. *Brazil AMB country risk report*.
7. Andrade, J. P., & Teles, V. K. 2007. An empirical model of the Brazilian country risk - an extension of the beta country risk model. *Applied Economics*, 38 (11): 1271-1278.
8. Andrade, J. P., & Teles, V. K. 2008. Monetary policy and country risk. *Applied Economics*, 40 (15): 2017-2024.
9. Bank of Bilbao Vizcaya Argentina, 2012. *Assessing Country Risk at BBVA Research, Cross Country Emerging Markets Unit*.
10. Beckman, D., Menkhoff, L., & Suto, M. 2007. *Does culture influence asset manager's views and behavior?* Discussion paper no. 367, Waseda University, Japan.
11. Besanko, D., Dranove, D., Shanley, M., & Schaefer, S. 2009. *Economics of strategy 5th ed*. New York: Wiley.
12. Blanchard, O. 2004. *Fiscal dominance and inflation targeting: Lessons from Brazil*. Working paper no. 10389, National Bureau of Economic Research, Cambridge.
13. Bostan, I., Morariu, A., Chasovschi, C., Nastase, C., Baesu, C., Kicsi, R., Buta, S., Albu, O., Zoltan, R., & Bejenaru, R. 2010. Particulars of cultural dimensions Masculinity / Femininity in the organizations in Suceva country. *B&L Business and Leadership*, 2-2010: 109-132.
14. Branson, W. H. 1981. *Macroeconomic determinants of real exchange rates*. Working paper no. 801, National Bureau of Economic Research, Cambridge.

15. Brzezinski, Z. K., & Friedrich, C. J. 1956. *Totalitarian dictatorship and autocracy*. Cambridge: Harvard University Press.
16. Cavusgil, S. T., Knight, G., & Riesenberger, J. R. 2012. *International business: A new realities (2nd edition)*. New Jersey: Pearson Education, Inc.
17. Central Bank of Brazil, 2000. *Inflation Report, December 2000*.
18. Central Bank of Brazil, 2001. *Inflation Report, December 2001*.
19. Central Bank of Brazil, 2002. *Inflation Report, December 2002*.
20. Central Bank of Brazil, 2003. *Inflation Report, December 2003*.
21. Central Bank of Brazil, 2004. *Inflation Report, December 2004*.
22. Central Bank of Brazil, 2005. *Inflation Report, December 2005*.
23. Central Bank of Brazil, 2006. *Inflation Report, December 2006*.
24. Central Bank of Brazil, 2007. *Inflation Report, December 2007*.
25. Central Bank of Brazil, 2008. *Inflation Report, December 2008*.
26. Central Bank of Brazil, 2009. *Inflation Report, December 2009*.
27. Central Bank of Brazil, 2010. *Inflation Report, December 2010*.
28. Central Bank of Brazil, 2011. *Inflation Report, December 2011*.
29. Central Bank of Brazil, 2012. *Inflation Report, December 2012*.
30. Chinn, M. D. 2005. *Getting serious about the twin deficits*. Council special report n° 10, Council on Foreign Relations, New York.
31. Combes, J. L., Kinda, T., & Plane, P. 2011. *Capital flows, exchange rate flexibility and the real exchange rate*. IMF Working paper no. 11/09, International Monetary Fund.
32. Cools, M., Slagmulder R., & Van den Abbeele, A. 2011. *Management control in inter-organizational relationships: Lessons learnt from public-private partnerships*. Working paper no. 1154, Katolishe Uneversiteit Leuven, Germany.
33. Dandashly, A. 2012. *The holy trinity of democracy, economic development, and security. EU democratization efforts beyond its borders – The case of Tunisia*. KFG Working paper series no. 42, Freie Universität, Berlin.
34. Dorde, K. 2008. A question of strategy: To be a pioneer or a follower? *Economic Annals*, 57 (177): 89-102.
35. Feldmann, H. 2009. *The quality of the legal system and labor market performance around the world*. Working paper no. 12, University of Bath, United Kingdom.
36. Georgeta, P. N. 2008. Multinational Corporation and the transfer of knowledge. *Revista Tinerilor Economisti (The Young Economists Journal)*, 1(10): 154-157.

37. Goldfajn, I., & Rigobon, R. 2000. *Hard currency and financial development*. Working paper as a part of the regional study "The Choice of Currency Arrangements in Latin America and the Caribbean", LCSPP, Economic Management Group.
38. Heinrichs M., & Stanoeva, I. 2012. *Country risk and sovereign risk – building clearer borders*. Article in Euromoney Handbooks.
39. Hofstede, G. 1983. National cultures revisited. *Behaviour Science Research*, 18: 285-305.
40. Hofstede, G. & Bond, M. H. 1988. The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16: 4-21.
41. Hofstede, G. 2011. Dimensionalizing cultures: The Hofstede model in context. *International Association for Cross-cultural Psychology*, article 8.
42. Iliescu, E. M. & Ciobanasu, M. 2010. Country risk – barrier or key factor of globalization. *Timisoara Journal of Economics*, 3: 175-182.
43. Kasper, H. 2005. *The culture of market oriented organizations*. Working paper no. 51, Maastricht University Netherlands, Netherlands.
44. Kerin, R. A., Varadarajan, P. R., & Peterson R. A. 1992. First-mover advantage: A synthesis, conceptual framework, and research propositions. *Journal of Marketing*, 56: 33-52.
45. Keynes, J. M. 1936. *The general theory of employment, interest and money*. London: Macmillan.
46. Kipici, A. H., & Kesriyeli, M. 1997. *The real exchange rate definitions and calculations*. Publication no° 97/1, Central Bank of the Republic of Turkey, Turkey.
47. Kirca, A. H., Cavusgil S. T., Hult, T. M. 2009. The effects of national culture on market orientation: Conceptual framework and research propositions. *International Business Review*, 18: 111–118.
48. Laeven, L., & Woodruff, Ch. 2004. *The quality of the legal system, firm ownership, and firm size*. Unpublished work for World Bank and School of International Relations and Pacific Studies.
49. Lane, P., & Milesi, G. M. F. 2004. The transfer problem revisited: Net foreign assets and real exchange rates. *Review of Economics and Statistics*, 86 (4): 841–857.
50. Lange, O. 1934. *On the economic theory of socialism*. London: MacMillan.
51. Lartey, E. K. K. 2008. *Capital inflows, Dutch disease effects and monetary policy in a small open economy*. Working paper, California State University, Fullerton.

52. Lee, J., Milesi, G. M. F., & Ricci, L. A. 2006. *Methodology for CGER exchange rate assessments*. IMF Working paper, International Monetary Fund, Washington.
53. Lee, J., Milesi, G. M. F., & Ricci, L. A. 2008, *Real exchange rates and fundamentals: A cross-country perspective*. IMF Working paper 08/13, International Monetary Fund, Washington.
54. Lerner, A. P. 1934. Economic theory and socialist economy. *Review of Economic Studies*, 2(1): 51-61.
55. Lieberman, M. B., & Montgomery D. B. 1988. First-mover advantages. *Strategic Management Journal*, 9: 41-58.
56. Maia, P., & Garcia, M. G. P. 2010. *A gerência recente do endividamento público Brasileiro*. Texto para discussão no. 595, PUC Rio, Rio de Janeiro.
57. Marey, P.S. 2004. Exchange rate expectations: Controlled experiments with artificial traders, *Journal of International Money and Finance*, 23: 283 – 304.
58. Minkov, M. 2011. *Cultural differences in a globalizing world*. Emerald: Bingley.
59. Missiroli, A., & Loannides, I. 2012. *Arab springs and transitions in the Southern Mediterranean: The EU and civil societies one year on*. Berlaymont papers no. 1, European Commission, Brussels.
60. Naknoi, K. 2008. Real exchange rate fluctuations, endogenous tradability and exchange rate regimes. *Journal of Monetary Economics*, 55(3): 645-663.
61. Nevins, J. L., Bearden, W. O., & Money, B. 2006. Ethical values and long-term orientation. *Journal of Business Ethics*, 71: 261–274.
62. OCDS, 2010. *Public debt: The Brazilian experience*.
63. OECD, 2013. *Historical country risk classification*.
64. Overby, M. L. 2005. *Partner selection criteria in strategic alliances: When to ally with weak partners*. Working paper no. 05-07, Copenhagen Business School, Copenhagen.
65. Paulonis, D., & Norton, S. 2008. *Managing global supply chains*. McKinsey survey, McKinsey & Company.
66. Perlmutter, H. 1969. *Internationalization of multinational corporations*. <http://www.businessmate.org>. Published in 16. 08. 2009.
67. Peters, T. J. & Waterman, R. H. 1982. *In search of excellence: Lessons from America's best-run companies*. New York: Harper & Row.
68. Rieger, M. O., & Wang, M. 2011. *Prospect theory around the world*. Discussion paper no. 2011/09, Thorsten Hens Norwegian School of Economics, Norway.

69. Rodik, D. 2008. *The real exchange rate and economic growth*. Working paper, John F. Kennedy School of Government, Harvard University, Cambridge.
70. Rueschemeyer, D. E. H. S., & Stephens, J. D. 1992. *Capitalist development and democracy*. Chicago: University of Chicago Press.
71. Salimath, S. M. 2010. Operational issues for entrepreneurs in the global context. *Global Operations Management*: 131-134. New York: Nova Science Publishers, Inc.
72. Silberstein, B. K. 2010. *North Korea: Fading totalitarianism in the "Hermit Kingdom"*. Working paper no. 836, Research Institute of Industrial Economics, Stockholm, Sweden.
73. Sungwook, M., Kalwani, M. U., & Robinson, W. T. 2006. Market pioneer and early follower survival risks: A contingency analysis of really new versus incrementally new product-markets. *Journal of Marketing*, 70: 15-33.
74. Syed, A. Z., & Sajid, A. 2010. *Supply-side effects of exchange rates, exchange rate expectations and induced currency depreciation*. DPRC Working paper, Lahore University on Management Sciences, Lahore.
75. Thompson, J., & Strickland, A. 2003. *Strategic management: Concepts and cases*. New York: McGraw- Hill/Irwin.
76. Twardy, D. 2008. *Partner Selection: A source of alliance success*. Economic study, Zuyd University, Netherlands.
77. U.S. Department of Justice, 2012. *A resource guide to the U.S. Foreign Corrupt Practices Act*.
78. United Nations Development Program, 2013. *Human Development Report 2013*.
79. United Nations, 2010. *Convention on contracts for the international sale of goods*.
80. Virmani, A. 2005. *China 's socialist market economy: Lessons of success*. Working paper no. 178, Indian Council for Research on International Economic Relations, New Delhi.
81. Wanke, P., F. 2012. Capacity shortfall and efficiency determinants in Brazilian airports: Evidence from bootstrapped DEA estimates. *Journal of Air Transport Management*, 23: 47-53.
82. Weitzel, U. 2005. *Growth and innovation strategies in global competition*. Discussion paper series no. 05-29, Utrecht School of Economics, Netherlands.
83. Winterstein, P. 2013. *Brazil airport capacity limits competition between airlines*. <http://www.wsj.com>. Published in 27. 04. 2013.

84. Zhu, A. 2006. *Public enterprises and economic growth: Evidence from the mixed economies*. Working Paper no. 05/2006, School of Humanities and Social Sciences Tsinghua University, Beijing, China.
85. Zhu, A. 2007. *Public enterprises in mixed economies: Their impact on social equity*. Working paper no. 04/2007, School of Humanities and Social Sciences Tsinghua University, Beijing, China.

CONSULTED WEBSITES

AICEP - Portuguese Agency for Investment and External Commerce.

<http://www.portugalglobal.pt>.

ANAC - Agency for Civil and Aviation. <http://www.anac.gov.br>.

ANATEL - National Agency of Telecommunications. <http://www.anatel.gov.br>.

ANTAQ - National Agency for Waterway Transportation. <http://www.antaq.gov.br>.

ANTT – National Agency for Ground Transportation. <http://www.antt.gov.br>.

APEX - Brazilian National Promotional Agency. <http://www2.apexbrasil.com.br>.

BE - Brazil Embassy. <http://www.brazil.org.nz>.

BNDES - Brazilian Development Bank. <http://www.bndes.gov.br>.

Brazil Business. <http://thebrazilbusiness.com>.

CAPA - Center for Aviation. <http://centreforaviation.com>.

CBIC – Chamber of Civil Construction Industry. <http://www.cbic.org.br>.

CIA World Factbook. <http://www.cia.gov>.

CNT - National Transport Confederation. <http://www.cnt.org.br>.

Culture Crossing. <http://www.culturecrossing.net>.

DCA - Department of Civil Aviation. <http://www.dca.gov.my>.

Doing business. <http://www.doingbusiness.org>.

EIU - Economist Intelligence Unit. <http://www.eiu.com>.

EPL - Logistics and Planning Company. <http://www.epl.gov.br>.

FGTS - Guarantee Fund for Length of Service. <http://www.fgts.gov.br>.

Hofstede Centre. <http://geert-hofstede.com>.

IBGE - Brazilian Geographical and Statistics Institute. <http://www.ibge.gov.br>.

IIF - Institute of International Finance. <http://www.iif.com>.

INFRAERO - National Aviation Company. <http://www.infraero.gov.br>.

INPI - National Institute for Intellectual Property. <http://www.inpi.gov.br>.

IPEA - Institute for Applied Economic Research. <http://www.ipea.gov.br>.

Mapsoft. <http://mapsof.net>.

MCTI - Ministry of Science, Technology and Innovation. <http://mcti.gov.br>.

Mercosul. <http://www.mercosur.int>.

MEFP - Ministry of Economy and Finance. <http://www.fazenda.gov.br>.

Ministry of Sport. <http://www.esporte.gov.br>.

MTE - Ministry of Labor and Employment. <http://www.ipea.gov.br>.

PAC - Growth Acceleration Program. <http://www.pac.gov.br>.

PIL - Logistic Investment Program. <http://www.logisticabrasil.gov.br>.

Portal of Transparency. <http://www.portaltransparencia.gov.br>.

PRONATEC - National Program to Access to Technical Education and Employment.

<http://pronatec.mec.gov.br>.

RAIS - Annual Relation of Social Information. <http://www.rais.gov.br>.

Real Plan. <http://www.fazenda.gov.br/portugues/real/planreal.asp>.

SBPE - Brazilian System for Savings and Loans. <http://www.pac.gov.br/minha-casa-minha-vida/financiamento-habitacional-sbpe>.

SEP - Special Secretariat of Ports. <http://www.portosdobrasil.gov.br>.

UNDP - United Nations Development Program. <http://www.undp.org>.

UNESCO - United Nations Educational, Scientific and Cultural Organization.

<http://en.unesco.org>.

WB - World Bank. <http://www.worldbank.org>.

WDB - World Data Bank. <http://databank.worldbank.org>.