**UNIVERSIDADE DE SÃO PAULO
FACULDADE DE ECONOMIA, ADMINISTRAÇÃO E CONTABILIDADE
DEPARTAMENTO DE ADMINISTRAÇÃO
PROGRAMA DE PÓS-GRADUAÇÃO EM ADMINISTRAÇÃO**

Responsabilidade Social Corporativa em multinacionais brasileiras

Corporate social responsibility in Brazilian multinationals

Karen Esteves Fernandes Pinto

Orientador: Prof. Dr. Moacir de Miranda Oliveira Junior

**São Paulo
2017**

Prof. Dr. Marco Antonio Zago
Reitor da Universidade de São Paulo

Prof. Dr. Adalberto Américo Fischmann
Diretor da Faculdade de Economia, Administração e Contabilidade

Prof. Dr. Roberto Sbragia
Chefe do Departamento de Administração

Prof. Dr. Moacir de Miranda Oliveira Junior
Coordenador do Programa de Pós-Graduação em Administração

Karen Esteves Fernandes Pinto

Corporate social responsibility in Brazilian multinationals

Tese apresentada ao Programa de Pós-Graduação em Administração do Departamento de Administração da Faculdade de Economia, Administração e Contabilidade da Universidade de São Paulo como requisito parcial para a obtenção do título de Doutora em Ciências.

Orientador: Prof. Dr. Moacir de Miranda Oliveira Jr

Versão Corrigida

(Versão original disponível na Biblioteca da Faculdade de Economia, Administração e Contabilidade)

São Paulo

2017

Autorizo a reprodução e divulgação total ou parcial deste trabalho por qualquer meio convencional ou eletrônico para fins de estudo e pesquisa, desde que citada a fonte.

FICHA CATALOGRÁFICA

Elaborada pela Seção de Processamento Técnico do SBD/FEA/USP

Pinto, Karen Esteves Fernandes

Corporate social responsibility in Brazilian multinationals / Karen

Esteves Fernandes Pinto. -- São Paulo, 2017.

256 p.

Tese(Doutorado) – Universidade de São Paulo, 2017.

Orientador: Moacir de Miranda Oliveira Júnior.

1. Empresas multinacionais 2. Responsabilidade social 3. Inovação

AGRADECIMENTOS

Ao Prof. Dr. Moacir de Miranda Oliveira Jr pela orientação e pela amizade durante esses sete anos de pós-graduação na FEA-USP.

Ao Prof. Dr. Paulo Roberto Feldmann e à Profa. Dra. Sylmara Gonçalves-Dias pelas válidas contribuições em minha banca de qualificação.

Ao Prof. Dr. Roberto Sbragia pela indicação e confiança ao me recomendar para participar do programa de doutorado sanduíche na Suécia.

Às multinacionais brasileiras que puderam participar da pesquisa que permitiu a realização deste estudo.

Ao grupo de pesquisa liderado pela Profa. Dr. Maria Tereza Leme Fleury (EAESP-FGV e FEA-USP), Prof. Dr. Afonso Fleury (Poli-USP), Prof. Dr. Moacir de Miranda Oliveira Junior (FEA-USP), Prof. Dr. Felipe Mendes Borini (FEA-USP) e Prof. Dr. Germano Glufke Reis (EAESP-FGV). Tais professores e seus orientandos, dentre os quais me incluo, foram os responsáveis pela viabilização da pesquisa Multinacionais Brasileiras em todas as suas etapas; sem as reflexões e os dados coletados, esta tese não teria atingido seus objetivos.

À Fundação de Amparo à Pesquisa do Estado de São Paulo (Fapesp) pela concessão da bolsa de doutorado, pelo apoio financeiro para a realização desta pesquisa e pelo apoio financeiro para a participação em um programa de pós-graduação internacional em Viena, Áustria.

À Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Capes) pela concessão de bolsa de doutorado sanduíche e pelo apoio financeiro para realização de parte do curso de doutorado na Universidade de Linköping, Suécia.

Aos meus pais, Sidney e Rose, e à família como um todo pelo incentivo à educação; ao meu noivo, Alexandre, pela paciência durante essa jornada; aos queridos Billy e Nicolau pela eterna amizade e companheirismo.

RESUMO

Pinto, K. E. F. (2017). *Corporate social responsibility in Brazilian multinationals* (Tese de Doutorado). Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo, São Paulo.

O objetivo deste estudo é analisar a relação existente entre multinacionais brasileiras e Responsabilidade Socioambiental Corporativa (RSC). A fundamentação teórica proporciona informações relevantes sobre RSC e inovação para sustentabilidade, ambos os temas são a base para o desenvolvimento de hipóteses. Para a coleta de dados, uma *survey* eletrônica foi enviada para multinacionais brasileiras que atuam em diversos segmentos e indústrias; 60 questionários válidos foram obtidos. Para analisar os dados, o procedimento de análise multivariada foi aplicado, o qual envolveu os procedimentos de correlação canônica e regressão linear múltipla. A análise descritiva indica que a maior parte das multinacionais brasileiras está sediada na região sudeste, especialmente no Estado de São Paulo. Os resultados da análise multivariada foram suficientes para sustentar cinco hipóteses: existe, então, uma correlação positiva entre os constructos; i) diretrizes para multinacionais (definidas por órgão internacional – OECD – e enfatizadas por pesquisadores) e o cumprimento de regulamentações socioambientais; ii) diretrizes para multinacionais e RSC como estratégia de diferenciação; iii) o cumprimento de regulamentações socioambientais e RSC como estratégia diferenciação; iv) adoção de práticas de inovação para sustentabilidade e diretrizes para multinacionais; e v) práticas de inovação para sustentabilidade e o cumprimento de regulamentações socioambientais. Não houve suporte empírico para a hipótese que previa uma correlação positiva entre práticas de inovação para sustentabilidade e RSC como estratégia de diferenciação.

Palavras-chave: Multinacionais brasileiras. Responsabilidade Socioambiental Corporativa. Inovação para sustentabilidade.

ABSTRACT

Pinto, K. E. F. (2017). *Corporate social responsibility in Brazilian multinationals* (Tese de Doutorado). Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo, São Paulo.

The purpose of this study is to analyze the relationship between Brazilian multinationals and Corporate Social Responsibility (CSR). The theoretical framework provides relevant information on CSR and on Sustainability-Oriented Innovation (SOI), which are the basis for the development of hypotheses. In order to collect data, an e-survey was conducted with Brazilian multinationals operating in different industries and segments; as result, we obtained 60 valid questionnaires. In order to analyze the data, a multivariate analysis was accomplished, which involved the procedures of canonical correlation and multiple linear regression. The descriptive analysis indicates that most Brazilian multinationals are headquartered in the Southeast region, especially in the State of São Paulo. The outcomes of the multivariate analysis provided empirical support for five hypothesis: there is a positive correlation between the constructs: i) guidelines for multinationals (defined by OECD and emphasized by several scholars) and the compliance with social and environmental regulation; ii) guidelines for multinationals and CSR as differentiation strategy; iii) compliance with social and environmental regulation and CSR as differentiation strategy; iv) SOI practices and guidelines for multinationals; and v) SOI practices and the compliance with social and environmental regulation. The results did not support the hypothesis that predicted a positive correlation between SOI practices and CSR as differentiation strategy.

Keywords: Brazilian multinationals. Corporate social responsibility. Sustainability-oriented innovation.

LIST OF ILLUSTRATIONS

Illustration 1 - Association between innovation and sustainability.....	39
Illustration 2 - General objective of the study.....	41
Illustration 3 - CSR constructs	42
Illustration 4 - SOI construct.....	42
Illustration 5 - Secondary objectives of the research	43
Illustration 6 - Push factors for internationalization.....	61
Illustration 7 - Benefits of internationalization	70
Illustration 8 - Innovation processes in a transnational company	75
Illustration 9 - Definition of emerging markets.....	84
Illustration 10 - Drivers for internationalization	94
Illustration 11 - Phases of the internationalization of multilatinas.....	102
Illustration 12 - Latin American multinationals by percentage.....	104
Illustration 13 - Phases of industrialization in Brazil	113
Illustration 14 - Emergence of Brazilian multinationals	121
Illustration 15 - Internationalization index.....	125
Illustration 16 -Triple Bottom Line	137
Illustration 17 - Relationship between economic conditions and socially responsible corporate behavior.....	143
Illustration 18 - Why companies adopt CSR.....	146
Illustration 19 - Relationship among the topics explored in the research	167
Illustration 20 - Conceptual model of the study	170
Illustration 21 - Arithmetic mean	205
Illustration 22 - Equations used to calculate the median.....	206
Illustration 23 - Standard deviation equation for samples.....	207
Illustration 24 - Five-level Likert item.....	208
Illustration 25 - Univariate, bivariate and multivariate analysis	216
Illustration 26 - Model of canonical correlation.....	217
Illustration 27 - Model of multiple regression.....	221
Illustration 28 - Equation of multiple regression.....	221
Illustration 29 - Hypotheses with empirical support vs. hypothesis with no empirical support	236

LIST OF TABLES

Table 1 - – Ease of doing business in emerging economies.....	32
Table 2 - Inflation in the BRICs.....	33
Table 3 - Outward and inward FDI (as a share of GDP).....	33
Table 4 - Definitions of multinationals	64
Table 5 - CAGE Framework	68
Table 6 - Advantages and strategies of EMNCs	93
Table 7 - The ten largest Brazilian multinationals in 2010	96
Table 8 - The ten largest Brazilian multinationals in 2016	96
Table 9 - Share of the BRICs in the world GDP (%)	97
Table 10 - GDP annual growth in the BRICs from 2010 until 2015.....	98
Table 11 - Multilatinas and the industries in which they operate.....	105
Table 12 - Number of large companies in Latin America.....	107
Table 13 - Comparison between Latin America and China, India and Russia.....	108
Table 14 - Brazilian GDP growth during the 1980s.....	117
Table 15 - FDI between 2000 and 2014 (million US\$).....	124
Table 16 - Segments in which Brazilian multinationals operate.....	126
Table 17 - Countries in which Brazilian multinationals operate.....	127
Table 18 - Geographic areas in which Brazilian multinationals operate.....	128
Table 19 - Corporate Social Responsibility	139
Table 20 - Propositions for CSR	140
Table 21 - Shifts in the established paradigm	148
Table 22 - Hypotheses of the study	182
Table 23 - Questionnaire of the research.....	189
Table 24 - Construct 1	195
Table 25 - Construct 2.....	196
Table 26 - Construct 3.....	197
Table 27 - Construct 4.....	198
Table 28 - Cronbach's alpha of the constructs	199
Table 29 - Federal states that host Brazilian multinationals	202
Table 30 - Brazilian multinationals by region.....	203
Table 31 - Industries in which Brazilian multinationals operate.....	204
Table 32 - Descriptive statistics	205
Table 33 - Classification of the Likert scale.....	208
Table 34 - Frequency of Construct 1.....	209
Table 35 - Percentage of the variables of Construct 1	210
Table 36 - Frequency of Construct 2.....	210
Table 37 - Percentage of the variables of Construct 2	211
Table 38 - Frequency of Construct 3.....	211
Table 39 - Percentage of the variables of Construct 3	212
Table 40 - Frequency of Construct 4.....	212
Table 41 - Percentage of the variables of Construct 4	213
Table 42 - Synthesis of the descriptive analysis.....	213

Table 43 - Analysis of the variables of all constructs	214
Table 44 - Test for multicollinearity	218
Table 45 - Canonical correlation analysis	219
Table 46 - Model summary	223
Table 47 - ANOVA ^a	223
Table 48 - Coefficients of the multiple linear regression	224
Table 49 - Results for hypotheses	230

ABBREVIATIONS AND ACRONYMS

ABNT	Associação Brasileiras de Normas Técnicas
ANOVA	Analysis of Variance
APA	American Psychological Association
BNDES	Banco Nacional de Desenvolvimento Econômico e Social
BOP	Bottom of the Pyramid
BRIC	Brazil, Russia, India and China
BRMNC	Brazilian Multinational Corporation
CAGE	Cultural, Administrative, Geographic and Economic distances
CSN	Companhia Siderúrgica Nacional
CSR	Corporate Social Responsibility
CVRD	Companhia Vale do Rio Doce
EMNC	Emerging Market Multinational Company
ESR	Entrepreneurial Social Responsibility
FDC	Fundação Dom Cabral
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GM	Guidelines for Multinationals
GRI	Global Reporting Initiative
ICLEI	International Council for Local Environmental Initiatives
IT	Information Technology
ITA	Instituto Tecnológico de Aeronáutica
M&A	Mergers and Acquisitions
MBA	Master of Business Administration
MNC	Multinational Corporation
OECD	Organization for Economic Co-operation and Development
OFDI	Outward Foreign Direct Investment
PET	Polyethylene Terephthalate
PPE	Personal Protective Equipment
R&D	Research and Development

RBV	Resource-Based View
SOI	Sustainability-Oriented Innovation
SPSS	Statistical Package for the Social Sciences
TQEM	Total Quality Environmental Management
TQM	Total Quality Management
VIF	Variance Inflation Factor
WCED	World Commission on Environment and Development

TABLE OF CONTENTS

INTRODUCTION.....	25
1.1 Introduction.....	27
1.2 Research issue and objectives	31
1.3 Relevance and expected contributions of the study	43
1.4 Structure	46
1.5 Theoretical and operational definitions of the relevant concepts of the research	48
THEORETICAL FRAMEWORK	51
2.1 – Brief overview.....	53
2.1.1 - Globalization, internationalization and multinationals	55
2.1.2 – Strategy in multinationals.....	71
2.1.2.1 – Strategic relevance	74
2.1.2.2 – Autonomy of subsidiaries.....	77
2.1.2.3 – Integration between headquarters and subsidiaries	80
2.2 – EMNCs, Global Latinas & Brazilian multinationals.....	83
2.2.1 – Emerging market multinationals	83
2.2.2 – Multilatinas.....	99
2.2.3 – Brazilian multinationals	108
2.3 Social and environmental issues	130
2.3.1 Corporate social responsibility, sustainable development and social and environmental awareness	130
2.3.2 Strategy and CSR	147
2.3.3 CSR in multinationals	153
2.3.4 Sustainability-oriented innovation	161
2.4 – Brief account	166
2.5 – Conceptual model of the research	170
HYPOTHESES	171
3. Hypotheses of the research.....	173
3.1 Hypothesis for CSR and SOI	173
3.1.1 CSR and Brazilian multinationals	174
3.1.2 Guidelines for multinationals and SOI.....	178
3.1.3 Compliance with regulations and SOI.....	180
3.1.4 CSR as differentiation and SOI.....	181
3.2. Synthesis of the hypotheses.....	182

METHODOLOGY	183
4. Methodology	185
4.1 Strategy and methodological procedures	185
4.1.2 About the survey: sample, questionnaire, pre-test, and data collection	186
4.1.2.1 Sample	188
4.1.2.2 Questionnaire	189
4.1.2.3 Data collection.....	191
4.1.3 Variables of the study.....	193
4.1.3.1 Construct 1: Guidelines for Multinationals	194
4.1.3.2 Construct 2: Regulation.....	195
4.1.3.3 Construct 3: CSR as differentiation.....	196
4.1.3.4 Construct 4: SOI.....	197
4.1.3.5 Methodological remarks about the constructs	198
PRESENTATION AND ANALYSIS OF RESULTS	200
5. Presentation and analysis of results.....	201
5.1 Descriptive analysis.....	204
5.2. Multivariate analysis	215
5.2.1 Canonical correlation	216
5.2.2 Multiple linear regression.....	220
5.3 Hypotheses	225
5.3.1 Hypothesis 1	225
5.3.2 Hypothesis 2.....	226
5.3.3 Hypothesis 3.....	227
5.3.4 Hypothesis 4.....	227
5.3.5 Hypothesis 5.....	228
5.3.6 Hypothesis 6.....	229
5.3.6 Synthesis	229
CONCLUSION	231
6. Conclusion.....	233
6.1 Limitations and suggestions for future studies	237
REFERENCES	238
ANNEX A – E-mail sent to companies	254
ANNEX B – Questions in the survey.....	256

INTRODUCTION

1.1 Introduction

The main objective of this research is to analyze the relationship between Corporate Social Responsibility (CSR) and Brazilian multinationals. The secondary objective is to analyze sustainability-oriented innovation in Brazilian multinationals, considering that this is a critical matter when it comes to the competitive advantage of multinational corporations (Nidumolu, Prahalad, & Rangaswami, 2009; Porter & Linde, 1995). This second approach will be carried out on a systematic network of observation points, correlating remarks regarding CSR and sustainability-oriented innovation.

It is important to contextualize that these Brazilian companies are part of a larger group of multinationals, known as emerging market multinationals, e.g. multinationals originating from emerging markets. Even though Brazil is currently considered the ninth largest economy in the world (World Bank, 2016), behind other emerging markets such as China and India, and ahead of some developed countries like Canada and Australia, and Mexico, a country from which some powerful *multilatinas* arise (Casanova & Fraser, 2009a; Casanova, Fraser & Hoerber, 2009), Brazilian companies still present a cautious and timid behavior when considering their internationalization process (Fleury & Fleury, 2009, 2012, 2014; Borini et al., 2010; Casanova & Fraser, 2009a; Losada-Otálora & Casanova, 2014; Casanova, 2015; Ramamurti, 2012; Melo, 2009, Cyrino & Tanure, 2009, Pattnaik & Kumar, 2014).

In order to approach the issues related to the emergence of multinationals e.g. emerging multinationals, mainly Brazilian ones, we need to step back a little bit. The world we live in today is not the same it was decades and centuries ago. It is easily perceived that humankind has been through several changes, not only with regard to the increase in the number of inhabitants on Earth, world wars, and higher demand for food sources, but also considering the courses in which goods were manufactured and how the society organized for the establishment of certain organizations that would be responsible for the production and provision of determined products and services.

Over the past centuries, production and manufacturing methods were created, alongside with the adoption of steam power and more efficient use of water power, which marked the commencement of the factory system. It is, therefore, possible to infer that such revolutionary era changed the way the current population lived; suddenly the offer of products were larger and it was easier to get to new products and services.

The boost in the quantity and variety of capital goods resulted in a better division of specialized labor, making it possible for companies to strengthen their competitive advantage. In the first half of the 20th century, one could notice the advances made in the production system of famous corporations, e.g. Ford, with the mass production and standardization system in the automobile industry, and Toyota, which pursued an increase in productivity and efficiency avoiding waste by means of the just-in-time production system.

The economic growth occurring since the beginning of the 20th century is undeniable. The society begins then to observe the emergence of large companies, which, in order to remain competitive and to promote their own survival, start moving beyond their borders, becoming influent not only in their countries of origin, but in different countries and continents. In such scenario, we mention the birth of multinational companies, which can be roughly defined as companies that have operations in other countries apart from their own.

There is not only one single large multinational group, but several ones, which are always competing for new markets, new customer segments and new industries. In order to remain competitive, many of these companies appealed to innovation, which is considered a crucial and necessary element for their survival in the current aggressive market (Griffiths & Wall, 2012). In a dynamic market where changes occur frequently, becoming the pioneer in the innovation field may provide a long-term competitive position for the ones that start adventuring in new businesses, developing new products, and providing new services. Considering that innovation is crucial for companies' survival, one could easily assert that investing in innovation is all it takes to remain competitive; the more a company innovates, the more crashed will its competitors be. Nevertheless, such boost in the economy – linked with an accelerated production of goods and services – and the drive for innovation have a downside.

As economy, population and companies grow, the society has to deal with the fact that human activities end up causing not only social, but also environmental problems. For a long time, companies have believed that they were supposed to generate profits without minding environmental externalities (Friedman, 1970), so issues related to pollution and degradation of ecosystems ended up being ignored. After a few international summits, such as the United Nations Conference on the Human Environment held in Stockholm in 1972, the Rio de Janeiro Earth Summit in 1992, and the United Nations Conference on Sustainable Development (a.k.a. Rio+20) in 2012, these issues became recurrent and companies and governments started to propose solutions to minimize damages and to prevent the emergence of new ones.

Companies used to believe that investing in social and environmental issues would entail a loss in competitiveness. After all, corporate programs such as recycling and social inclusion always generate costs, which companies were not willing to deal with. Slowly, however, such mindset starts changing; many companies realize that being socially and environmentally responsible may actually bring more profits by turning them into organizations that are more competitive (Porter & Kramer, 2002, 2006; Porter & Linde, 1995; Falck & Heblich, 2007; Campbell, 2007; Carrol & Shabana, 2010). Sometimes such gains come from the better reputation a company acquires, which can turn it into more influent in the business world for embracing sustainability causes; other times companies realize that reducing the use of raw materials with the proper technology may lead to more efficient production processes, which does not only avoid damaging the environment, but also reduces the costs of production, generating profits.

That way, one would expect multinationals to be more aware of social and environmental issues, embracing the causes of the so-called Corporate Social Responsibility (CSR), which is a form of addressing social and environmental concerns into the business model of the company. However, we forget that many companies see CSR as a threat rather than a business opportunity. For many companies, the costs in developing more sustainable activities may not always bring the expected returns, which turns them into mere compliers of basic regulations to avoid the emergence of fines imposed by other countries. In that sense, one can point out the appearance of

opportunistic behaviors, since companies can be more responsible in more strict countries due to local regulation and less in unregulated environments (Gonçalves-Dias & Teodósio, 2011; Abramovay, 2007).

When we consider both CSR performance and Brazilian multinationals, international indexes do not present the best results. According to the world's most sustainable companies index provided by Forbes (Forbes, 2016), from the 50 companies listed, none comes from emerging markets or South America. It is possible to observe that 72% of these companies are European; followed by North-American (14%) – only represented by the United States and Canada –; Asian (10%); and Oceanian (4%). Curiously, most of the most sustainable companies operate in the banking and oil, gas and consumable fuels industries; the latter involves not very sustainable activities, considering the extraction of a finite resource plus the pollution linked to discharges of toxic residues. Even though the Brazilian Bank Itaú is considered a responsible institution involved in several social and environmental initiatives (Batista et al., 2005; Casanova & Dumas, 2010), it was not included in the Forbes' index, which can indicate that, not only these particular companies, but other ones have to stand out more in the areas of sustainability and CSR.

It is, however, our intention to explore herein if issues related to CSR in Brazilian multinationals alongside sustainability-oriented innovation are becoming recurrent in the daily routine of organizations.

Considering the emergence and rise of Brazilian multinational corporations and the evolution of the concepts of corporate social responsibility and sustainability and the rise of innovation, e.g. sustainability-oriented innovation, for the competitiveness of organizations, our study explicitly addresses this conundrum: “How is the behavior of Brazilian multinationals concerning corporate social responsibility and how does it relate to sustainability-oriented innovation?” In order to address this question, we integrate Corporate Social Responsibility and Sustainability-Oriented Innovation views to develop a model identifying these practices by Brazilian multinationals. We first review the literature on environmental and social issues, multinational corporations, and sustainability-oriented innovation, followed by propositions, discussions, and conclusion.

1.2 Research issue and objectives

The evolution of the global economy in the twentieth century led to the development of financial markets and international trade, turning economic relations into a more complex phenomenon (Vasconcellos & Garcia, 2004). The world has become, therefore, more interconnected, pushing together economic, technological, political, sociological and cultural forces (Griffiths & Wall, 2012). The possibility of internationalization emphasized competition in the world market, where companies started to face expansion as an essential requirement for their survival and thus achieved a reduction in production costs, an increase in productivity and an expansion of their existing brands. In this context, it is possible to identify the presence of multinational corporations, which, in a generalized way, are corporations that operate in other countries apart from their own (Fleury & Fleury, 2009).

It is possible to suppose that subsidiaries of multinational corporations can play strategic relevant roles, which can also be related not only to CSR issues, but also to innovation (Oliveira Jr et al., 2009a). It was believed that a world strategy could mean the sum of the several needs of national subsidiaries (Bartlett & Ghoshal, 1992); by using a global mentality, however, it became possible to understand that the diversity of international environments was a reality and that it could be faced as a competitive differential (Oliveira Jr et al., 2009a).

According to such statements, many multinational corporations started to adapt to new realities in different countries and started to operate in other developing markets. In the 1990s, as a reflection of this new world trend, Brazil became the second largest recipient of foreign direct investment (FDI) among emergent economies; as result, from the 500 largest multinational corporations in the world, 405 operated in the country (Lacerda, 2001; Borini, 2005).

The interest of foreign companies in Brazil demonstrates an improved perception of the Brazilian economy (Pfeifer, 2009), especially due to its stability after the 2008

financial crisis. Thus, regarding the performance of multinationals in Brazil, the country seems to have positive effects on international capital (Borini et al., 2010).

The increase of investments in the Brazilian economy may be related to a variable called ‘ease of doing business’. The World Bank created an index, which ranks economies according to their ease of doing business, from 1 (easiest) to 183 (most difficult); a low score means the regulatory environment is conducive to the operation of business (World Bank, 2016). This index covers eleven areas of business regulation: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, and labor market regulation. When compared to other emerging economies, i.e. BRICs, Brazil recently placed third, behind Russia and China.

Table 1 – Ease of doing business in emerging economies

<i>Country</i>	<i>Position in 2014</i>	<i>Position in 2015</i>	<i>Position in 2016</i>
<i>Brazil</i>	111.0	116.0	123.0
<i>Russia</i>	54.0	51.0	40.0
<i>India</i>	134.0	130.0	130.0
<i>China</i>	83.0	84.0	78.0

Source: Based on data presented by the World Bank (2016).

Some Latin American countries were better positioned when compared to Brazil in 2016, such as Colombia (53.0), Chile (57.0), Uruguay (90.0), Paraguay (106.0), and Argentina (116.0); others were in worse positions, such as Bolivia (149.0), and Venezuela (187.0), the latter is actually among the five less well-placed countries in the sample.

One factor that could influence the ease of doing business is inflation, even though this indicator was not directly measured by the index provided by the World Bank. In the years of 1993 and 1994, the inflation reached the surprising range of 2,001.3% and 2,302.8% respectively in Brazil (World Bank, 2016). Over the past years, however, the inflation in the country presented an average of 7.8%, which is above the figures presented by India and China, and below the ones presented by Russia. In 2015, nonetheless, the inflation rate in Brazil was superior to the Russian.

Table 2 – Inflation in the BRICs

<i>Country</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
<i>Brazil</i>	8.4	8.3	7.8	7.4	6.9	8.0
<i>Russia</i>	14.2	23.6	8.3	4.8	9.0	7.7
<i>India</i>	9.0	5.2	7.9	6.2	3.3	1.0
<i>China</i>	6.9	8.1	2.4	2.2	0.8	-0.5

Source: Based on data presented by the World Bank (2016).

Either way, the amount of Foreign Direct investments (FDI) in Brazil is a reality. Between the years of 2005 and 2015, the FDI stocks, which measure the total level of direct investments and are measured as a share of GDP, showed significant changes. The outward FDI, for instance, went from 8.5 to 10.08% of the GDP in this period; the inward FDI from 19.94 to 27.01% (OECD, 2016). The table below demonstrates the comparison between outward and inward FDI flows in emerging economies in 2015.

Table 3 – Outward and inward FDI (as a share of GDP) in 2015

<i>Country</i>	<i>Outward FDI</i>	<i>Inward FDI</i>
<i>Brazil</i>	10.1	27.0
<i>Russia</i>	23.3	21.0
<i>India</i>	6.4	12.9
<i>China</i>	10.4	26.2

Source: Based on data presented by the OECD (2016).

Both outward and inward FDI presented by Brazil and China are quite similar; the major difference is the outward FDI presented by Russia at this given point of time; it is more than the double of the amounts presented by both countries. India is evidently the country with less inward and outward FDI flows.

Despite the increase in the number of foreign investments, the new market strategy for social and environmental issues remains insufficiently explored in Brazil. The country invests in initiatives aiming at sustainable development, but only with public resources or with private enterprises and joint initiatives. Some studies demonstrate that Brazil presents unsatisfactory figures in areas such as energy efficiency and environmental preservation, which may create business opportunities for companies with the appropriate expertise, technology, and resources to explore new markets (Bourscheit, 2009).

It is possible to notice, therefore, that, simultaneously with the period of multinationalization of companies, there is a rising concern regarding social and environmental issues. Entrepreneurial initiatives support and stimulate programs related to the preservation of the environment, reduction of environmental damage or risks and initiatives related to social aspects (Batista et al., 2005). Combining low costs, high-quality standards and innovation, companies start to incorporate in their analyses social and environmental impacts rooted in operational processes (Aligleri et al., 2009).

Considering that the adoption of corporate social responsibility (CSR) provides companies with a differentiated identification of their branded products bringing positive results to their trade balance, it is possible to state that such action increases the achievement of markets and becomes an important resource to both local and global competitiveness (Aligleri et al., 2009). One can notice over the past years the emergence of several global initiatives related to social and environmental topics, as, for example, the United Nations Conference on the Human Environment held in Stockholm in 1972, the Rio de Janeiro Earth Summit in 1992, the Earth Charter (1997), the Kyoto Protocol (1997), the United Nations Global Compact (1999), the United Nations Conference on Sustainable Development (a.k.a. Rio+20) in 2012, and the models proposed by the Global Reporting Initiative (GRI). With the evolution of such initiatives, issues related to social and environmental concerns became recurrent, making governments and companies to start proposing solutions to minimize damages and to prevent the emergence of new ones.

In this context, even though the Brazilian environment may not always look like the most favorable one for the strategic operation of foreign multinational corporations – e.g. due to tax legislation, government policies, and inflation –, it does not imply necessarily that foreign multinationals operating in the country are only active in areas related to the exploitation of local resources (Pinto, Oliveira Jr, & Borini, 2013).

The concern on environmental issues presented by subsidiaries of multinational corporations start to become more clear. Some subsidiaries located in Southern Brazil already take into account environmental aspects during their production process, since they pursue a good reputation in the market, while seeking sustainability. These companies do not link environmental management to extra costs; they relate such management to economic profits. What makes these subsidiaries more conscious of their social and environmental responsibilities is usually related to either the development of the country of headquarters or to the headquarters' strict attitude towards environmental and social issues, or, even further, to requirements of internal markets (Martins et al., 2007).

A study accomplished with the largest subsidiaries of multinational corporations operating in Brazil demonstrates that even though 45% of these subsidiaries affirm they adopt CSR practices in the country, there is no direct correlation between developed economies and CSR practices in emerging countries. A stricter legislation in developed economies does not imply that the headquarters, e.g. subsidiaries, develop proactive environment and social responsibility in Brazil (Pinto, Oliveira Jr, & Borini, 2013).

When it comes to Latin America, Brazil's leading efforts to promote social and environmental responsibilities demonstrate the best results (Schmidheiny, 2005). Such leadership can be attributed to the following factors: i) the commitment of business leaders to social and environmental projects; ii) a more favorable environment for investment when compared to other Latin American countries; and iii) import companies requiring a more responsible behavior from exporters. By maintaining such progress, companies may offer Brazil a better performance in sustainable issues (Ibid.).

It is possible to observe in several industries worldwide, however, the allocation of resources in the short-term perspective (Hawken et al., 2000). The extension of state functions in administrative matters related to social and environmental policies becomes broader especially due to major natural disasters and to the depletion of renewable and non-renewable resources.

The association between the terms "environmental" and "social" is justified by the fact that all the environmental damages have social repercussions (Nascimento, 2005).

Therefore, social and environmental responsibilities become, in this study, concepts inextricably linked. In fact, in the 1990s, social and environmental responsibilities were no longer handled separately (Abdala & Oliveira, 2009).

Although Brazil does not accomplish long-term perspectives in some market sectors and although the state and the private sectors avoid infrastructure investments which do not provide immediate economic benefits, significant changes through private initiatives can be noticed as, for example, Banco Itaú Holding Financeira S.A., whose responsibilities relate to the reduction of water profligacy, savings of electrical energy, prevention of solid wastes and paper off cuts, reduction in the emission of pollutants, and implementation of important educational and social projects (Batista et al., 2005; Casanova & Dumas, 2010).

There is one specific subject that always emerge when it comes to the adoption of CSR policies and initiatives: are companies responsible because they want to comply with legislation, do they become responsible after getting penalties for breaking rules, or do companies perceive a significant competitive advantage when acting proactively regarding regulatory compliances?

In relation to the Brazilian regulatory system, one can affirm that environmental policies achieved a more active role only from the middle of the 20th century on, as has happened in many countries throughout the world. The development of the Brazilian environmental policy was slow due to inefficient public policies and due to the belief that the environmental protection should not hinder the country's economic growth (Sousa, 2008). Until 1972, the year of the United Nations Conference on the Human Environment (also known as the Stockholm conference), there was in Brazil no concrete environmental policy, but rather policies that resulted in it (Ibid.). The country seemed to be more committed to achieving its projected economic development than to managing its natural and social resources.

Even though Brazil has since 1981 a consolidated legislation that regulates issues related to social and environmental responsibilities, its implementation is considered, however, ineffective (Sanchez, 2012). Moraes & Turolla (2004) agree with such statement, emphasizing that the economic policy did not seem compatible with the protection of the environment, which results in negative aspects for the country. Even

though the concern for environmental preservation has increased, public investments continue to represent only a small fraction of the resources allocated in this area.

With such an ineffective legislation implementation, one would believe that many companies chose to have a reactive position concerning CSR issues: until the law catches up with them, they may not have any kind of environmental nor social responsibility.

Based on the information presented herein regarding the presence of Brazilian multinational corporations abroad, as well as information regarding both social and environmental responsibilities, one may observe that this study is trying to fill a gap in the existing literature on CSR and SOI in Brazilian multinationals operating abroad. This gap in the literature relates to the development of CSR initiatives in multinationals originated from emerging economies, especially when these initiatives are taken in subsidiaries of these multinationals. Welford (2010) emphasizes such statement when affirming that the majority of the research on CSR is much more related to a Western mindset with a Western research focus; very little extends to developing countries.

Now that the main topics regarding CSR and multinationals have been covered, it is necessary to approach the other matter this research is trying to address: sustainability-oriented innovation. In the introduction of this thesis, some aspects regarding innovation were already mentioned, but it is necessary to bring in further information to justify the purposes of the research.

Innovation itself is a very relevant topic in the entrepreneurial sphere because it is considered a relevant determinant of growth; innovation is an important strategic variable because it acts like a catalyst to companies that want to become leaders in their respective fields (Griffiths & Wall, 2012). The concern about innovation is no recent phenomenon; it dates back to the 1940s, when Schumpeter (1942) started to mention the need to innovate. According to him, changes in the economy entail changes in industries, which tend to disrupt old paradigms in order to create new – and more competitive – ones. In other words, innovation indicates the creation of the new while destroying the obsolete.

Peter Drucker (1969) emphasized the need to create new products in order to create new markets. In that sense, it was necessary to consider all current products

obsolete so that new ones could be developed. More recently, Christensen (1997, ref.) raised awareness of disruptive technologies; according to him, in order to pursue innovation, disruptive strategies should be sought instead of revolutionary ones. That way, it would be possible to create new markets by proving simpler – and even cheaper – products.

It is, however, clear that each one of these three authors developed their own theories on how to pursue innovation and/or innovative products. Even though there were a few disagreements and differences related to the theories they presented, one point seems to be common in their researches: innovation is inevitable. If innovation is an undeniable reality in the entrepreneurial sphere, so as it happens with the notable increase of sustainability-oriented initiatives and CSR issues, is it possible to relate them in a research that analyzes the performance of Brazilian multinationals and CSR? That question was the driver for us to deepen our analysis in such issue.

First, it is necessary to provide some information regarding innovation and Brazilian companies. Even though the Brazilian industry is competitive in some high-technology sectors, such as aerospace and automobile industry, which accounts for about 10% of total revenues and 6% of employment, productivity and innovation in the country can be considered low (Griffiths & Wall, 2012).

One possible explanation is that Brazilian companies usually operate in low-technology sectors, so they usually develop process innovation by obtaining standard or commoditized products while attaching to them a strong competitive advantage (Fleury & Fleury, 2014). It is possible to affirm that Brazilian multinationals tend to invest in process oriented R&D, keeping a strong relationship with local and foreign universities and research centers (Ibid.). According to Casanova (2015a), innovation is the missing link for Latin American companies: while private sector leads innovation investments in most regions, Latin American companies did not invest enough in research and development, and that is why they lag behind in innovation.

Ramamurti (2012) indicates, on the other hand, an advantage of emerging market multinationals: they usually stand out when it comes to frugal innovation since they are capable of coming up with new products quickly and cheaply. One example given by the author refers to Chinese companies, which developed a technology that enabled the

manufacturing of lithium-ion batteries that use less expensive inputs and can be produced at ambient temperature.

Perhaps this urge to invest in frugal innovation is linked with the ability to develop innovation as both survival instinct and growth driver (Casanova & Fraser, 2009a). Besides, the fact that emerging market economies, e.g. Latin American ones, faced severe challenges in the past (e.g., high inflation rates, currency depreciation, and *coup d'état*), it enabled them to learn how to navigate in troubled waters while embracing an innovative culture (Ibid.).

Recent academic studies investigate the association between the terms “innovation” and “sustainability” (Boons et al., 2013; Roscoe, Cousins & Lamming, 2016; Iñigo & Albareda, 2016; Franceschini, Faria & Jurowetzki, 2016; Jay & Gerard, 2015; Hansen, Grosse-Dunker & Reichwald, 2009; Nidumolu, Prahalad & Rangaswami, 2009; Klewitz & Hansen, 2001, among others). In our understanding, the innovation that takes into account sustainable issues may have emerged due to the increase in environmental and social problems worldwide, a stronger competitiveness in most of the industries, in which companies fight for their survival in the market, and the emergence of a new niche, in which this sort of innovation is appreciated.

Illustration 1 – Association between innovation and sustainability

Source: Pinto (2017).

One can find in the literature examples of authors who refer to this sort of sustainability as “sustainable innovation” (e.g. Boons et al., 2013; Iñigo & Albareda, 2016), and others who refer to it as “sustainability-oriented innovation” (e.g. Klewitz & Hansen, 2011; Hansen, Grosse-Dunker & Reichwald, 2009). We decided to choose the latter in this study, since the term “sustainable” is sometimes not quite clear about what it actually entails and stands for (Veiga, 2005). Such issues related to definitions will be explored in Section 1.5.

The emergence of sustainability-oriented innovation, or SOI, as it will be defined herein, is related to the current competitiveness faced by companies worldwide. Boons et al. (2013) believe that the future competitiveness will be no longer defined by the struggle to remain competitive, but by the creation of new markets underpinned by innovation. In accordance with these authors, the challenges faced in the fields of sustainability can be transformed into business opportunities, creating new global markets, allowing the specialization of some regions and giving governments politically long-term perspectives for policy action. Hansen, Grosse-Dunker & Reichwald (2009) mention that the challenges that sustainability offers can lead to a significant potential for innovations and related business opportunities.

Most importantly, SOIs cannot only focus on social and environmental aspects; they need to be commercially relevant; the triple bottom line used in sustainability definitions is also present in this sort of innovation, since economic, social and environmental goals have to be fulfilled (Jay & Gerard, 2015).

Since innovation is a key factor for companies to remain competitive and to successfully compete in changing markets (Klewitz & Hansen, 2011), and considering that SOIs offer several market potentials while fulfilling economic, social, and environmental goals (Hansen, Grosse-Dunker & Reichwald, 2009, Jay & Gerard, 2015), we decided to analyze in our study the relationship between Brazilian multinationals and SOI, as we consider this aspect to be relevant for such companies.

Considering that all pertinent topics of this research have already been explored in the present section, we will proceed with the presentation of the research objectives. The general purpose of this research is to explore the presence of CSR in Brazilian multinationals operating abroad. We also intend to, therefore, accomplish a descriptive analysis of the results obtained from the variables that measure CSR in Brazilian

multinationals. The illustration below demonstrates the main objective of the research by showing the variables related to CSR that our study seeks to cover.

Illustration 2 – General objective of the study

Source: Pinto (2017).

In order to improve the visualization of the data and to present the main findings in a more direct way, we decided to turn these variables into constructs; further information will be given in Section 4. The different colors used in this illustration indicate the three different constructs that cover the part related to CSR.

Illustration 3 – CSR constructs

Source: Pinto (2017).

With regard to SOI, we developed one construct, which covers three different variables. It is important to mention that such variables were developed based on studies that addressed issues related to sustainability-oriented innovation.

Illustration 4 – SOI construct

Source: Pinto (2017).

That way, besides accomplishing the main objective of the research, we intend to accomplish the following secondary objectives.

- 1) To explore the relationship between CSR and SOI;
- 2) To explore the relationship between the guidelines for multinationals and SOI;
- 3) To explore the relationship between regulation and SOI; and
- 4) To explore the relationship between CSR as differentiation and SOI.

Illustration 5 - Secondary objectives of the research

Source: Pinto (2017).

1.3 Relevance and expected contributions of the study

As mentioned in previous sections, the existence of emerging market multinationals is a reality in the current world economy. Lassere (2012) reinforces such statement by affirming that the growing importance of emerging countries companies and markets in the world is currently one of the key characteristics of the global business environment.

When considering the BRICs, it is possible to affirm that this acronym marks the shift in the global economic power away from the developed economies and towards the developing world (Griffiths & Wall, 2012). It is clear that once the BRICs start getting more attention from all economies around the world due to, among other factors, a remarkable increase of the GDP and the representative strength of a newborn middle class, the importance attributed to such emerging countries starts to grow.

Unlike other developed economies, the path through which emerging countries had to walk by to achieve the importance they have today was quite different. Even though emerging countries are a source of opportunities, their business and institutional environments are still significantly different from the ones found in OECD countries, for instance (Lassere, 2012). The prevailing institutional context of emerging market economies are a distinguished feature when compared to developed economies, which is characterized by the lack of proper infrastructure and an inefficient regulatory and contract enforcement regimes (Pattnaik & Kumar, 2014).

Emerging markets were for a long time characterized by bad attributes, such as weak political institutions, corruption, social tensions, overreliance on natural resources, and degrading natural environments (Ramamurti, 2012). Such aspects could then hinder their potential for growth and competitiveness, which is probably the reason why other developed economies did not take emerging market companies seriously in the beginning. There are, however, other common characteristics in these countries, which include low income levels, fast economic growth, and the emergence of a prosperous middle class (Lassere, 2012; Griffiths & Wall, 2012). It seems, however, that these emerging countries managed to work with such institutional disadvantages by facing challenges as opportunities, especially when addressing efforts towards the bottom of the pyramid, e.g. the largest, but poorest socio-economic group (Prahalad, 2010).

Even though there are several researchers that focus on the emanation and evolution of emerging market multinationals, e.g. Brazilian multinationals, the major focus of academic research still seems to be more inclined in covering the internationalization phenomenon from a developed world perspective. It is clear nowadays that there is a considerable difference between late movers, e.g. emerging countries that started internationalizing after other developed economies had already

achieved a prominent position in the world market, and first movers, e.g. the first countries to go through the internationalization process (Fleury & Fleury, 2007).

When it comes to issues related to CSR, for instance, it is possible to affirm that most of the research that covers this topic is related to a Western mindset with a Western research focus; very little of these researches extend to considering the achievements accomplished by developing countries (Welford, 2010). The internationalization process, CSR initiatives, and rise of emerging companies relate to a subject that has its own specificities; they demand for their own researches and studies rather than generalized theories.

Considering that globalization has deep social, political and environmental consequences (Lassere, 2012) and that all aspects of contemporary business and management practices have an impact on sustainability (Dobers, 2010), Lassere (2012) affirms that multinationals, considered agents of globalization, are usually blamed for misconduct in several occasions, e.g. pollution, corruption, child labor and poor citizenship. Steiner & Steiner (2000) affirm that the responsibility attributed to multinationals is usually directed to developed country companies, since there is no natural sense of social and environmental responsibility in African and Latin American countries. Such statement emphasizes the focus on the developed world, neglecting accomplishments fulfilled in emerging economies, especially in Brazil.

It is possible to affirm, therefore, that there is a gap in the area of international business concerning the accomplishments achieved by developing economies with regard to social and environmental issues and sustainability-oriented perspectives. Even though there are several studies analyzing the success of emerging multinationals when dealing with social and environmental issues (Ako, 2014; Boehe & Cruz, 2010; Jamali, 2010; Beckham, Colwell & Cunningham, 2009; Eberlein & Matten, 2009; Pinto, Oliveira Jr & Borini, 2013), there is no research that analyzes the role played by CSR in Brazilian multinationals, neither studies that verify the relationship between CSR and SOI in such companies.

Based on the insights presented herein, this research is relevant because it intends to explore the characteristics of CSR and, to a lesser extent, SOI of emerging

multinationals (e.g. Brazil) operating abroad. Despite the emergence of such themes in the academic agenda over the past years, such topics still present a large research potential. Issues that explore the competitive aspects of CSR are relevant, since competing based on low labor costs seems to be no longer an option for countries like Brazil due to two of the largest low-cost countries: China and India (Boehe & Cruz, 2010). We intend to discuss these issues by using variables found in the literature, which cover the main topics mentioned herein. It is expected that this study enable a better understanding of the role played by Brazilian multinationals abroad when it comes to internationalization strategies encompassing CSR and SOI. We hope, therefore, that both CSR and SOI aspects are incorporated in the phenomenon of internationalization as a factor that can promote competitiveness.

As for managers, we expect this study to boost discussions about social and environmental responsibilities in Brazilian entrepreneurial spheres, especially with regard to Brazilian multinationals operating abroad and companies that intend to internationalize. It is also expected that managers start facing CSR as a market opportunity, since it involves a niche still little explored by Brazilian multinationals.

1.4 Structure

In order to accomplish the main and secondary purposes of this study, this thesis has been divided into six sections: (i) Introduction; (ii) Theoretical framework; (iii) Hypotheses; (iv) Methodology; (v) Presentation and analysis of results; and (vi) Conclusions. It is important to mention that the last part of the current section, “Introduction”, will cover the theoretical and operational definitions of the relevant terms used in this research. The establishment of such definitions is pertinent not only because they explain the main terms and issues addressed herein, but also because they indicate which theoretical directions the authors will be using to justify the main arguments and implications of the study.

The second section, “Theoretical framework”, could encompass several subjects that have some sort of relationship with the main topic of this thesis, e.g. the origins of internationalization, historical prospects of emerging economies, innovation theories, etc.

It is not, however, our purpose to handle every single theme that is related to multinationals, CSR and innovation, e.g. SOI. In the theoretical framework, therefore, we intend to cover the following topics: Globalization, internationalization & multinationals; Emerging multinationals, Global Latinas & Brazilian multinationals; Social and environmental issues; Corporate Social Responsibility in multinationals; Sustainability-Oriented Innovation; and Theoretical guideline of the study. When covering the issue related to Brazilian multinationals, we will also mention some information regarding the Brazilian institutional context in which one can notice the emergence of Brazilian multinationals.

The hypotheses of the research, covered in the third section, will be developed based on the information presented in the theoretical framework. The main purpose of the hypotheses is to indicate the relationship between CSR in Brazilians multinationals and SOI elements. The statistical approach will, therefore, offer empirical basis to support the assumptions indicated by the hypotheses.

The following section, “Methodology”, will deal with all the relevant information regarding data collection procedures, sample, and nature of the research. This section is very important because it explains how the data was obtained, which statistical procedures will be used to analyze results, the period of time in which the data collection was accomplished, and the variables used to measure CSR and SOI. In other words, the methodology section explains how the research was conducted, where it was accomplished, and with which tools. Methodology is usually the topic that gives direction in a study; it provides the guidelines the reader needs to comprehend all relevant aspects of the research.

The penultimate part of the thesis covers the presentation and analysis of the results obtained from descriptive and statistical procedures. In this section, one may expect to find several illustrations and tables in order to present the results in a more direct way. The descriptive and analytical analyses will be accomplished in this part of the research, represented by the results obtained from the statistical procedures. The validation of the proposed hypotheses will be also accomplished in this section; that way, the reader will easily identify which hypotheses had empirical support and which did not.

Finally, the “Conclusion” section will present a general panorama of the main topics, objectives, hypotheses, and analyses of the whole study. In this section, we will indicate whether our findings are, in fact, relevant for the field of business administration and/or international business and whether our contribution has positive implications or not. In this part, we will also mention the main limitations of the study, as well as suggestions for future research.

1.5 Theoretical and operational definitions of the relevant concepts of the research

Multinational corporation. Corporation is defined as a group of companies that have the same purpose, follow the same principle, same rules and regulations, and have a common command center. Multinational is defined as a company that operates in other countries apart from its origin country. According to Bartlett et al. (1990), a multinational corporation is a group of companies based on foreign direct investment, which is managed as an integrated operational unit. Operationally, in this research, we understand that such companies are the ones that have a substantial direct investment in foreign countries, while engaging in an active administration of their international operational. In this research, we will possibly use only the term “multinational”, instead of “multinational corporation”.

Subsidiary. Subsidiary is defined as a division of a company responsible for specific chores within the business in which the company operates. According to Birkinshaw et al. (1998), a subsidiary can be understood as any operational unit that is controlled by its headquarters and that is located outside the country of origin. In this research, subsidiary will be understood as a division of the multinational corporation, located in countries apart from the origin one, and that can play not only a specific role designated by the headquarters, but also similar functions.

Headquarters. The place where the central direction of a company is established. The headquarters have investments in several countries and achieve, therefore, economies of scale and scope through knowhow exchanges and also through the exchange of products

among productive units located in different countries (Cyrino, 2010). Headquarters can also be understood as a company located in its country of origin to which subsidiaries report.

Social and environmental practices. Social and environmental practices can be understood as the performance of social and environmental initiatives within an entrepreneurial environment. A company that adopts social and environmental practices should be involved with initiatives that promote social wellbeing and the preservation of natural environment. It does not imply, however, on the adoption of a social and environmental management as main guideline.

Corporate Social Responsibility. Corporate Social Responsibility is the responsibility constituted by four kinds of responsibility: economic, legal, ethical and philanthropic (Carroll, 1999). Operationally, it is possible to infer that CSR empirically consists of articulated and communicated policies and practices of corporations that reflect business responsibility for some of the wider societal good (Matten & Moon, 2008).

Sustainability-Oriented Innovation. Sustainability-oriented innovations are perceived as innovations that are individually recognized as adding positive net value to the overall firm's capital stock (Hansen, Grosse-Dunker & Reichwald, 2009).

THEORETICAL FRAMEWORK

2.1 – Brief overview

The presence of multinational corporations became so ordinary that we hardly stop to think about them, e.g. where do they come from, why they exist and when they first came up. However, if someone asks about multinationals, we feel quite ready to name a few examples: Ford, Volkswagen and Toyota, representing the automobile industry; Unilever for consumer goods; H&M for clothing-retail; Nestlé for food and drink and so on. The existence of these companies are so common that we hardly wonder about their origin. If H&M, for instance, is a Swedish company, why are the shops spread all over the world? How did automobile companies decided to go beyond their borders? What pushed these companies towards internationalization?

In order to address these questions, the first part of this section was developed in consideration of definitions and insights made by scholars and researchers in the areas of internationalization and globalization. Since the main purpose of this study is to deal with the issue of CSR exclusively related to multinational corporations, we believe it is important to provide some basic information regarding the emergence of such companies, as well as their purpose and influence in the business world. That way, we begin this section by bringing some observations about globalization and its relationship to the internationalization of companies. Afterwards, we will provide some definitions about multinationals, as well as factors that can hinder and/or boost their emergence.

It is also important to explore herein relevant information regarding two elements related to multinational corporations: headquarters and subsidiaries. We propose the discussion of themes such as the integration between headquarters and subsidiary and the strategic relevance of subsidiaries for the corporation as a whole. After providing these insights, we will introduce the next topic to be approached herein: emerging market multinationals, e.g. Brazilian multinationals.

We believe that it is necessary to handle emerging market multinationals and Brazilian multinationals separately since these companies differ from developed country multinationals. Companies originated from emerging markets tend to present a different

background marked by significant institutional challenges in the home market. Even though the BRICs (acronym for Brazil, Russia, India and China) will be handled in this topic, Brazil will be addressed separately, since Brazilian companies are the focus of the present study. The institutional characteristics of Brazil are also different from the ones found in the BRICs, which demands for special attention.

After establishing and contextualizing Brazilian multinationals – in addition to the characterization of internationalization, globalization, multinationals, headquarters and subsidiaries –, issues related specifically to CSR will be introduced in the research. There are several topics related to CSR: some of them are more related to sustainability and/or sustainable development; others relate to the environmental and social management that an organization can integrate into procedures and processes; and some focus on innovations that a company can develop taking into account social and environmental aspects. We do not intend to bring into discussion herein the different definitions one can find in the literature about such themes; we will, however, demonstrate some of the main definitions brought by scholars to characterize the most relevant topics. In this specific part, the main intention is to demonstrate how sustainability-related issues started being taken into account in the managerial sphere.

Section 2.3.1 is a small introduction for the topic. In this section, we will approach the main definitions of sustainability, e.g. sustainable development, environmental management, and CSR. Other relevant subjects for the research will also be approached in this part, such as the concept of triple bottom line. The main purpose of this part is to give the reader some context about social and environmental issues, as well as their importance for the entrepreneurial sphere.

Considering the role played by companies when it comes to social and environmental responsibility, we will approach in Section 2.3.2 the relationship between strategy and social and environmental aspects. Such section is very relevant for the research, since it indicates and explains how businesses can develop sustainable practices in order to remain competitive and to strengthen the image of the company. More specifically, the following Section (2.3.3) will indicate how CSR is approached in multinationals. In this section we will not only present initiatives accomplished by multinationals in different countries; we will also present relevant implications of foreign multinationals operating in Brazil.

The last theoretical topic herein will explore issues related to sustainability-oriented innovation (SOI), which is also a relevant matter in our study. We considered important to provide a special topic for such subject because SOI is one of the variables we intend to explore herein. In this part, we intend to investigate some concepts involving SOI, as well as other concepts that relate innovation and sustainability, such as sustainable innovation and eco-innovation. The differences among these definitions will be analyzed as well.

Finally, this theoretical framework ends with the presentation of the theoretical guideline of the research. The purpose of the theoretical guideline is to provide the reader with all the relevant issues and topics the study intends to address, demonstrating the variables involved in the process. The theoretical guideline is, in other words, a practical illustration of the research. After this theoretical section, we will proceed with the hypotheses of the study.

2.1.1 - Globalization, internationalization and multinationals

International businesses are no new phenomenon; they have existed in the society for a long time. Ancient travelling salesmen, for instance, were responsible for bringing different cultures together due to the establishment of global networks. The shift of international trade standards marked world economic policies for centuries; the wealth and power of nations were directly related to their ability to establish and manage effective trade relationships and financial arrangements through their established empires and partner networks (Bartlett et al., 1990). The search for resources, markets and cheap labor were important for the expansion of several world companies (Bartlett & Ghoshal, 1992).

It is currently easy to perceive the presence of international business; the same companies, brands, and products can be found practically everywhere. It seems that the state of “no frontiers” has become a stronger part of reality nowadays due to the easy in

finding specific products with specific features in places in which it would have been impossible in the past.

A possible explanation for such phenomenon is that over the past 30 years international trade and investments grew faster than the world economy as a whole (Lassere, 2012). Such statement seems to be underpinned by the World Trade Organization (2015), which indicates that the world exports of commercial services went from US\$ 1,179 billion in 1995 to US\$ 2,516 billion in 2005 and, then, to US\$ 4,872 billion in 2014 – this growth occurred besides the biggest drop in trade in 2009, after the 2008 world crisis. Considering the world merchandise exports (agricultural products, fuels and mining products, and manufactures), in 1995 one could find the amount of US\$ 5,168 billion; in 2005, US\$ 10,509 billion; and, in 2014, US\$ 19,002 billion. The growth between 2005 and 2014 occurred even with a drop of 22% of the world merchandise exports in 2009 due to the economic crisis in 2008.

Because of the growth in international trade, companies multiplied their presence in other countries, employing more people and selling/buying technology internationally; more products are sold in similar stores, with similar features and carry a common brand across the globe; factories that were prosperous in the Western world have been closed and transferred to low-cost countries; the English language is standard for major business transactions; televised broadcasts are visible in real time everywhere – these features are involved in the so-called “globalization era” (Lassere, 2012).

The features mentioned in the paragraph above indicate that the world has become increasingly interconnected in recent decades because of economic, technological, political, sociological and cultural forces (Griffiths & Wall, 2012). In this new scenario, in which one can notice the evolution of world economy, it is easy to perceive the presence of globalization, defined as the diffusion of innovation among countries and also the diffusion of political and cultural features, which comes with the dissemination of goods, services, people, abilities, and ideas through geographical borders (Oliveira et al., 2010). Globalization also has an impact on companies all around the world, including subsidiaries of multinational corporations (Morrison & Roth, 1993). Lassere (2012) defines globalization as the process by which people, products, information, and money can freely move across borders; still in accordance with this author, globalizing is the phenomenon of the transition of industries (e.g. telecommunication, processed food,

personal care, and retail) whose competitive structure changes progressively from multinational to global. Still regarding definitions, Fleury & Fleury (2012) define globalization as a social and political process in which countries and institutions are involved; internationalization, on the other hand, occurs within a company, in order to expand its activities towards other countries. According to them, globalization is a process by which the interconnections and interdependencies in several areas of human activity gradually increase.

Griffiths & Wall (2012) affirm, however, that globalization is more related to a process than to an end-state. From such statement, one would infer that globalization tends to be characterized by relevant changes occurred in new markets, new actors, new rules and norms, and new methods of communication. According to these authors, “quantitative and qualitative changes in these areas are arguably having major impacts in shaping corporate strategies and influencing the lives of employees and individuals worldwide”.

Still regarding globalization, Lassere (2012) believes that there are other terms that need further definition in order to comprehend the dimensions of globalization. These terms are global industries, global companies, and global integration and coordination. The first term, global industries, designate “industries in which, in order to survive, competitors need to operate in key world markets in an integrated and coordinated way”. Examples of such global industries are aerospace, computers, telecommunication equipment, appliances, power generation, large industrial projects, insurance and re-insurance, and corporate data transmission. The author points out that in such industry sectors it is difficult to sustain competition if the company does not cover – nearly – the whole world as a market; operations must be integrated in order to make them cost- and time-effective.

The second term, global companies, designate “companies that operate in the main markets of the world in an integrated and coordinated way”. As examples, the author mentions Coca-Cola, Sony, and Citibank. The last term, global integration and coordination, “are the organizational structure and management processes by which various activities scattered across the world are made interdependent”. The author gives

two examples to illustrate such statement: (i) the global manufacturing integration implies the specialization of factories and requires the coordination of research centers and marketing teams; and (ii) the global account management demands that different country subsidiaries provide a service according to a plan negotiated centrally.

Now that we already covered some relevant aspects regarding globalization, as well as some definitions about this concept, we intend to explore from now on the globalization from the company's perspective; in other words, we intend to demonstrate how companies are committed to contribute for the globalization process through internationalization and how it occurs. We shall begin this part by introducing some definitions about internationalization.

Cyrino et al. (2010), for instance, define internationalization as the acquisition of part or the totality of revenues of a company from international operations through exports, licensing, strategic alliances, company acquisitions in other countries or through the establishment of own subsidiaries abroad. In the process of internationalization, companies tend to increase their international commitment as they expand their knowledge regarding the operation in international markets. Unlike globalization, internationalization is a process that occurs within the company in order to turn this company into a competitor in an international environment (Fleury & Fleury, 2012). Internationalization can also be understood as a process in which knowledge is gained through the learning process within companies; many companies fail when entering international markets due to a lack of resources and competencies, which correspond to the knowledge gained in learning process that can be a source of competitive advantage (Cyrino et al., 2010).

In order to analyze the process in which international strategies are constituted, it is possible to find in the academic sphere three consolidated models: (i) the Uppsala Theory, which indicates that internationalization occurs in a sequential and incremental way due to company growth and the saturation of the domestic demand; (ii) the determinants of national competitive advantage, in which an international competitive advantage can be stimulated by national characteristics – such model has been proposed by Porter (1986) and is related to the diamond model –; and (iii) the Resource-Based View (RBV) model, which indicates that companies – not countries – are the essence of domestic and global entrepreneurial strategies (Oliveira Jr et al., 2010).

It is quite clear now what internationalization refers to when it comes to companies willing to operate abroad, but what drives this internationalization? How and why do companies feel this urge to become international? What promotes this internationalization? What hinders it?

Some authors have tried to solve this conundrum by proposing some explanations based on empirical studies. According to Fleury & Fleury (2012), for instance, the decision that companies make to go international is strongly associated with opportunities and threats that emerge in an international context, as well as the ability of the company to foresee these opportunities and to react to threats. Such ability is related to organizational competencies and to the managerial style developed within the company.

Griffiths & Wall (2012) mention the importance of technology as an enabler of international activities. According to these authors, while cost and market orientation provide important reasons for investing and producing overseas, the acceleration in the pace of globalization, e.g. internationalization, is tied up with advances in enabling technologies, which have reduced the costs of doing business across national frontiers. Internationalization is, therefore, a phenomenon related to agents, i.e. the social players that take part in the globalization process (Fleury & Fleury, 2012). These social players can be private and public companies, government institutions and NGOs.

Lassere (2012) provides important insights related to incentives, benefits, and barriers for internationalization. Even though most of these insights are more related to a broader approach of internationalization, e.g. globalization in the country level, some statements are relevant for our research.

First, the author deals with factors that push for international activities: political, technological (whose importance was emphasized by Griffiths & Wall, 2012), social, and competitive factors. The political factors relate to the liberalization of trade and investments, e.g. the development of free trade among nations. It is important to mention that policies that boost trade zones find many criticisms, since it is believed that developed nations tend to take advantage of developing nations. Companies from developed countries, for instance, are known for owning high-technology procedures and are more involved in the manufacture of high-technology products, which unquestionably implies

in higher production costs and higher prices for final consumers. On the other hand, many companies from developing countries tend to rely on the exports of natural resources, in which the economic value added tends to be lower. That way, developing countries would be in clear disadvantage in comparison with developed countries. Apart from this issue, it is undeniable that the liberalization of trade, e.g. reduction of trade barriers, boosted the emergence of international transactions, which is why Lassere (2012) considered this is a relevant push factor for international businesses.

Technological factors, which involve advances in transports, communication and economies of scale, are also relevant. The speed in which people communicate and travel from one place to another has certainly shortened distances and saved a lot of time; nowadays it is possible to arrange a business meeting with two people located in different continents and time zones; high-speed trains reduced travel time, favoring mobility. The technological progress also lowered the cost of transport and communication as well as the unit cost of production through economies of scale or the localization of productive capacities and sourcing in low-cost economies.

Social factors are pertinent because they indicate the convergence of customer needs. The convergence of customer behavior and needs is facilitated by the urbanization and industrialization of societies. That way, the less cultural and the more technical the product, the more likely it is to be standardized and appeal to consumers in different countries. Examples of such products are DVDs, PCs, mobile phones, elevators and cranes – in these cases, national differences do not seem to be very relevant.

The final push factor is related to competition. Competition itself boosts internationalization, e.g. globalization, since companies need to struggle in order to stay on the market; that means competing with companies in both national and international contexts. As example, Lassere (2012) mentions the Asian efficient production system, since the cost advantage in electronics and automotive parts made competitors adopt a similar strategic stance if they wanted to survive.

Illustration 6 - Push factors for internationalization

Source: Based on Lassere (2012).

Even though internationalization is identified as an ancient phenomenon in developed countries, in emerging countries like Brazil it is still a recent event. Such statement is made because there is still a low number of Brazilian companies operating abroad, especially in comparison with developed countries (Borini et al, 2010). Regarding developing countries, multinational companies play an important role in the business environment, since there is a great untapped potential in the field of internationalization of companies originated from important emerging economies, such as India, Mexico and Brazil (Cyrino et al., 2010). One could observe, however, an increase in the strategies involved with the expansion in international markets (establishment of subsidiaries,

associations and strategic alliances, establishment of production subsidiaries and R&D activities) (Ibid.).

Over the last century, one could notice the presence of multinational corporations. Such organizations were different from others because they presented a particular structure and operations when compared to companies related to trade or investments. Unlike trading companies, the operations of multinational corporations are based on foreign direct investment (FDI), which is managed as an integrated operational unit instead of a passive portfolio (Bartlett et al., 1990).

According to Bartlett & Ghoshal (1992), there are different definitions in the literature used to refer to companies involved with internationalization. According to the authors, multinational companies are the ones that develop a strategic position and an organization ability that allows them to be quite sensitive and receptive to the differences among national environments around the globe, administrating a portfolio of several national entities. Companies pushed by the need for global efficiency and centralized in their operational and strategic decisions are known as classic global companies; these companies develop products and strategies in order to explore a single and integrated world market. International companies, on the other hand, are the ones based on the transfer and adaptation of knowledge and abilities of the headquarters for external markets.

Considering that the world's largest companies have become truly global in scope, Griffiths & Wall (2012) define multinational company as "a company which owns or controls production or service facilities in more than one country". The authors mean, therefore, that a multinational cannot be understood as a company that simply trades internationally by exporting products (or by licensing overseas producers); multinationals own (via a wholly or partly owned subsidiary) or controls (via a branch plant, joint venture or minority shareholding) productive facilities in countries outside its home country. The authors indicate that the overseas productive facilities are acquired by taking over existing locally owned ability or investing directly in new plant and equipment: as examples, they mention Coca Cola's acquisition of parts of Cadbury Schweppes in the UK, and Nissan's plant in Washington or Toyota's car factory in Derby.

Griffiths & Wall (2012), however, criticize the technical definitions of multinationals because they fail to convey the true scope and diversity of global

businesses, which covers everything from the thousands of medium-sized companies that have operations overseas to the truly gigantic multinationals like IBM, GM, and Ford.

Apart from criticisms, Bartlett and Ghoshal (1992) show that, in order to survive in an international environment,, companies need to fulfil four objectives concomitantly (efficiency, receptivity, influence of knowledge and competencies of the headquarters). Once that a company succeeds in accomplishing such goals by mastering this multidimensional strategy, it becomes a transnational company, whose existence indicates a new managerial mentality. In the past, they affirm that a company only had conditions to compete in an effective way once that their resources were adjusted to the strategic demand of the area. In order to compete in a more effective way, the company needed to develop simultaneously global competitiveness, multinational flexibility, and worldwide learning ability. The development of such strategic competencies were an organizational challenge, demanding companies to break traditional administration methods up and to adopt a new organizational model. This model is known as transnational. The transition from a multinational, global or international attitude towards the transnational management demands time and can only be achieved with a substantial effort from managers. In such transnational model, subsidiaries become strategic partners and are directly related to the long-term and worldwide competitive advantage.

Even though the definition of transnational company accomplished by Bartlett & Ghoshal (1992) is relevant, more complete, and brings up important characteristics, such as the multinational strategy aspects of such companies, we decided to keep the nomenclature “multinational”. We believe that the definitions given for multinationals so far are in accordance with what we believe that expresses the meaning of these companies. That way, multinationals can be, for example, companies that own or controls production and services in more than one country (Griffiths & Wall, 2012), while basing operations on FDI (Bartlett et al., 1990), and developing a strategic position and organization, administrating portfolios of several national entities (Bartlett & Ghoshal, 1992). It is important to mention that the multinational corporation is not an entity that arises from flaws in the market in which knowledge is bought and sold; it comes up due to its superior

efficiency as an organizational vehicle through which knowledge is transferred (Kogut & Zander, 1993).

Cyrino et al. (2010), while attempting to provide definitions for companies involved in the international market, mention the emergence of global companies, whose investments are located in several countries, which leads to economy of scale and scope through the exchange of knowhow and products among productive units located in different countries. Such definition, even though designed to cover the explanation for the appearance of global companies, can also be used to describe multinationals, since the latter also invest in several countries in order to obtain e.g. economy of scale while boosting the exchange of know how.

The multinational corporation is an economic organization that indicates an evolutionary state: it arises in national borders aiming to go beyond them, to conquer different markets (Kogut & Zander, 1993). What has been happening over the past years is that such corporations, which already noticed the appearance of saturated markets, started to pay more attention to emerging market economies, such as India, Indonesia, China, Mexico, and Brazil, in order to find a key-localization to provide future growth (London & Hart, 2004). According to Hart (2006), multinational corporations can be defined as any corporation that has operations in more than one country. The author affirms that multinationals became a primary tool for economic globalization, which enabled the dissemination of efficient and competitive entrepreneurial practices. The advantage of multinational corporations is the availability of resources, power, transfer of knowledge, and migration to superior markets. Even though not every definition refers to “multinational” – some handle these companies as global companies or multinational corporations –, we believe that these definitions present a connection among themselves, which emphasizes the meaning of multinationals. The definitions below were sorted by date of publication.

Table 4 - Definitions of multinationals

<i>Author</i>	<i>Definition</i>
<i>Ghoshal & Nohria (1989)</i>	An organization composed of several units operating abroad.

<i>Bartlett et al. (1990)</i>	Companies whose operations are based on FDI, which is managed as an integrated operational unit.
<i>Bartlett & Ghoshal (1992)</i>	Companies that develop a strategic position and an organizational ability that allows them to be sensitive and receptive to the differences among national environments around the globe.
<i>Kogut & Zander (1993)</i>	An economic organization that aims to go beyond its frontiers in order to conquer new markets.
<i>Hart (2006)</i>	Any corporation that has operations in more than one country.
<i>Fleury & Fleury (2009)</i>	Companies with international operations.
<i>Cyrino et al. (2010)</i>	Companies whose investments are located in several countries, which leads to economy of scale and scope through the exchange of knowhow and products among productive units located in different countries.
<i>Griffiths & Wall (2012)</i>	A company that owns or controls production or service facilities in more than one country.
<i>Lassere (2012)</i>	Companies that operate in the main markets of the world in an integrated and coordinated way.

Source: Pinto (2017).

With the information provided until now it is possible to understand the concepts involved with companies that operate abroad somehow, as well as definitions and some of the roles played by such companies. When considering a broader panorama, one could affirm that the emergence of the so-called multinational companies started a long time ago, e.g. with the ancient spice trade between Asia, Northeast Africa and Europe or with the Portuguese caravels used for oceanic exploration and trading. Nevertheless, when do multinationals – as we know them today – start to become a more recurrent phenomenon? How did they emerge?

In order to address these questions, Fleury & Fleury (2012), two active researchers in the area of multinationals in Brazil, explain that it was only during the nineteenth century that multinational companies started to emerge. Such emergence was

accomplished by European companies, which aimed at foreign markets to expand their operations, influence, and brands. In the twentieth century, however, American companies took the lead in the internationalization wave. The first American multinationals developed large-scale production systems for standardized products. After World War II, American companies led the internationalization process and became a role model for multinationals from other countries.

The American supremacy, however, would not last forever. In the 1980s, a new country emerged with very powerful and international driven companies: Japan. The just-in-time production developed by the Japanese disseminated a philosophy to reduce waste by avoiding misuse in processes related to, for instance, overproduction and transportation. Such just-in-time production aligned with a continuous improvement principle enabled Japanese companies, especially Toyota, to manage their operations abroad in a more efficient and effective way. In the 1990s, the presence of multinational corporations became so strong that they started to be considered as the most important agents of globalization.

Nevertheless, not every multinational company was as successful as the Japanese. The lack of global efficiency triggered the failure of large companies operating outside their home countries. Even though information on Brazilian multinationals will be handled in Section 2.2.3, it is possible to affirm that the lack of an expressive activity of multinationals operating abroad is due to a weak insertion of these companies in foreign territories. Besides, the Brazilian international activities are more related to exports rather than the insertion of the subsidiary into the business network of the foreign country (Borini et al., 2010).

Apart from the specific Brazilian case, it is possible to notice that historically most of the multinational activity was concentrated in the developed world. Griffiths & Wall (2012) affirm that in the mid-1980s, half of the multinational production took place in only five countries: United States, Canada, United Kingdom, Germany, and the Netherlands. Even though that was the reality some years ago, the authors believe that this pattern is changing rapidly, since the industrialization and economy growth in newly industrialized nations has led to an increase in multinational investment in Asia and in Latin America. Some of these countries, especially Taiwan, South Korea, Hong Kong and Singapore, have reached GDP per capita levels that exceed those of most European

nations. Asian companies, for example, are establishing production facilities in European countries, which are the nations that used to rule the wave of internationalization.

This shift in the patterns of internationalization indicates that there are currently companies originating from Asian and emerging economies that also have conditions to compete with North American and European companies. However, how can multinationals succeed in such competitive and fast changing world market?

Bartlett & Ghoshal (1992) affirm that corporations need to administrate their companies in a globally integrated way in order to become more efficient and to succeed. Perhaps this is the reason why companies from emerging economies are successful when competing with developing market companies: they managed to administrate worldwide operations in a more integrated way. If companies fail in taking into account local needs, they tend to suppress the efforts towards international expansion. When operating beyond borders, managers from headquarters have to take into consideration aspects such as the climate, cultural specificities, and national and administrative policies, since they influence the behavior of managers working in the subsidiaries. Ignoring such differences may lead to a failure in international activities (Bartlett & Ghoshal, 1992; Ghemawat, 2008).

Unlike the other authors mentioned herein, Ghemawat (2008) emphasizes that the world is currently in the era of semi-globalization. According to him, it is not possible to use the word “globalization” in a world where the differences among nations cannot be encompassed neither globalized; such differences demand individual analyses and influence the international activity of companies.

The cultural distance, characterized by linguistic differences, the administrative difference, related to political and administrative structures such as censorships in the media, the geographical distance, related not only to the physical distance, but also to topography, climate and time zones, and economic differences, such as per capita income and development of commercial structure, constitute the CAGE framework. Such framework turns differences into more visible factors, which enables the comprehension of the disadvantage inherent to foreign companies (Ghemawat, 2008).

Table 5 - CAGE Framework

<i>Differences</i>	<i>EXAMPLES</i>
<i>Cultural differences</i>	Language
<i>Administrative differences</i>	Administrative structures
<i>Geographical differences</i>	Topography, climate, time zones
<i>Economic differences</i>	Per capita income

Source: Based on Ghemawat (2008).

In accordance with Ghemawat, Lassere (2012) mentions factors that can also hinder the possibility for internationalization. According to him, there are four factors that work against internationalization, which are similar to the ones defended by Ghemawat (2008).

The first factor mentioned by Lassere (2012) is culture, which relates to attitudes, tastes, behavior, and social codes. That way, when the consumption of a product or a service is linked to traditions and national or religious values, global standardization is not effective. The second element, commercial factors, refers to distribution, customization, and responsiveness. Distribution networks and practice can differ from country to country; therefore, the ways of managing the network, motivating dealers and distributors, pricing and negotiation are hardly amenable to global coordination. Responsiveness to customers' demands as well as customization tend to defeat standardization. "Private savings or current accounts for individuals, loans to small and medium-size enterprises (SMEs), mortgages, consulting activities and individual architectural designs are services for which a local presence and a fast reaction to customers' requirements are needed for competitive success". There are, naturally, practices and processes that can be standardized on a worldwide basis, e.g. consultants, engineering, architects or auditors, but it is important to acknowledge the customer's specific requests that can hinder internationalization.

The technical factors relate to standards, spatial presence, transportation, and language. These factors seem to be more linked with the cultural and administrative differences proposed by Ghemawat (2008). At last, the legal factors are the ones that deal with issues related to regulation and national security. Lassere (2012) believes, therefore,

that it is necessary to take into account local regulations, since not complying with them may entail the end of an international enterprise.

The barriers for internationalization have already been exposed herein; it is now clear that not taking into account local differences may cause the failure of the operations of a multinational company. There are, however, many reasons for companies to go abroad, such as cost reduction, differentiation, increase of the attractiveness of the sector, standardization of risks, job creation, and generation of knowledge and other resources (Ghemawat, 2008). When overcoming the differences between frontiers, companies have to consider the adaptation to the new environment, the aggregation of regional characteristics, and the arbitration for exploring differences among countries (Ibid.).

In accordance with Ghemawat (2008), Lassere (2012) mentions cost benefits as the first benefit of international activities. These cost benefits come from economies of scale in products and processes due to standardization and from an increased bargaining power over suppliers of raw materials, components, equipment, and services. Such benefits can also be related to the ability to organize a logistic and sourcing network based on location factors. Cost benefits are, therefore, strongly related to the market responsiveness for standardization and to price sensitive consumers. That way, if consumers tend to be less prone to standardized products and prefer tailored products and services, a global approach can be less appropriate. Timing benefits occur because of the coordinated approach to launch products in the early state of the product life cycle; waiting too long to launch a product can be catastrophic, especially if the product has a short life cycle.

Learning benefits involve the coordinated transfer of information, best practices, and people across subsidiaries. Such transfer is important because it facilitates the accumulation of experience and knowledge. It is important to mention that the benefits of learning are positive if the experience obtained in one country is applicable to a different country. If it is not applicable, “there is a timing deficit: the time it takes to realize that you have made a mistake, plus the time to learn about the new environment”. Finally, Lassere (2012) mentions arbitrage benefits, which have also been pointed out by Ghemawat (2008). Such benefits come from advantages that a company managed

globally can obtain in using resources in one country for the benefit of another country's subsidiary. With regard to tax arbitrage, governments can be very cautious to ensure that global companies do not abuse their arbitrage power.

Illustration 7 - Benefits of internationalization

Source: Based on Lassere (2012) and Ghemawat (2008).

Even though the current multinational model emphasizes global efficiency, national receptivity and global learning as necessary items for a multinational corporation to be successful, a native ability is also very necessary, whose purpose is to demand that multinational companies expand their concepts of global economy to include several

other economic activities in the countries in which they operate (Hart, 2006). Such activities may also include sustainable aspects, in order to improve the way in which people live. In order to increase the native ability, it is necessary to interact with the population of a determined area in which multinational companies operate, understanding their needs and demands, which results, many times, in competitive advantages for multinationals.

Despite the imminence of issues that relate multinationals and sustainability and even though we agree with Hart (2006) when affirming that the adoption of sustainable practices can provide competitive advantages for multinationals, such issues will only be handled in Section 2.3.3, CSR in multinationals.

In this current section, we managed to approach all the relevant issues related to globalization, internationalization and multinational companies. We provided the readers with the main definitions of these terms found in the literature, as well as differences among them. We intended to provide herein some classic definitions about multinationals, internationalization and globalization, which is why not every reference used herein is recent (less than ten years old). We tried to, however, bring up some recent publications, such as Ghemawat (2008), Fleury & Fleury (2012), Lassere (2012), and Griffiths & Wall (2012). Some older references, such as Bartlett & Ghoshal (1992) and Bartlett et al. (1990), were used herein because we consider these studies pioneer in their respective areas; therefore, they could not be left out. Since we already covered these issues in this section, we believe we can move on to the next topic, where we will deal with matters related to headquarters and subsidiaries.

2.1.2 – Strategy in multinationals

The term “strategy” becomes frequently a topic of discussions in the academic sphere because there is no agreement regarding its definition. It is possible to affirm, however, that strategy is related to ancient Greece and was used to designate military ranks. During the First Industrial Revolution, strategy was not considered a relevant

feature; only after the Second Industrial Revolution it started to be seen as a pertinent element, since it could shape market forces by influencing the competitive environment. During the World War II, strategy gained more importance due to the strategic thinking used to guide managerial decisions. In the United States, for instance, the combination between strategy and business came up only after World War II due to the competition created between services provided by armed forces (Ghemawat, 2007).

The concept of strategy ended up being improved and integrated into academic discussions, from which some definitions emerged: Slack et al. (1999) define strategy as the global pattern of decisions and actions that place the organization in its environment in order to fulfil long-term objectives. According to Maximiano (2009), for instance, strategy is defined by the objectives in the organization and the way to get to them.

When dealing with multinationals, however, the strategic approaches need to cover global and international aspects. That way, one important driver for globalization was a competitive strategy known as global chess, whose rules established that only companies that managed their global operation as interdependent units guided by a global strategy could take part. Considering that the traditional multinational approach indicated that each national market was independent, the global chess strategy emphasized the effects caused by financial interdependence. A corporation with global operations, therefore, had more advantages of using funds generated in one market in order to subsidize its position in a different market (Bartlett & Ghoshal, 1992).

Multinational corporations, which operate in several international markets, usually perceive the challenge of searching for global efficiency, reducing costs through economies of scale, in order to meet the needs of the markets, which – with different needs – demand for different services. Corporations that manage to define distinct roles for their subsidiaries and integrate these units by through socialization mechanisms and communication flows tend to obtain positive results with relation to emerging challenges (Oliveira Jr et al., 2009a).

Regarding organizational issues involving headquarters and subsidiaries, Bartlett & Ghoshal (1992) propose models to explain different organizational settings. The first model, known as multinational organizational model, is a classic organizational model and relates to the decentralization of organizational goods and resources in order to make foreign operations respond to the differences that distinguish national markets. Such

configuration is considered a decentralized federation. This international organizational model is characterized by the transfer of knowledge and techniques for foreign environments that are less advanced in terms of technology and/or market development. In such scenario, subsidiaries are allowed to adapt products and strategies to the markets in which they operate, but they depend on the headquarters in terms of new products and processes. Unlike the previous case, an international organizational model is characterized as a coordinated federation. In addition, the third and final concept, global organizational model, implies the centralization of assets, resources and responsibilities; consequently, operations abroad aim to cover foreign markets creating global scales. The main activity of subsidiaries is, therefore, limited to sales and services. This model proposes that subsidiaries should be more attached to the headquarters without providing them with the necessary freedom to create new products neither strategies, including necessary adjustments and modifications. This model is also known as centralized core.

Such models indicate that there are different ways to organize international activities in order to enhance competitiveness through strategies involving headquarters and subsidiaries. It is not possible to assume, however, that there is only one ideal way to organize a complex multinational company. Sometimes, in determined sectors and industries, one can affirm that the centralized model provides better results in terms of global scale; in other particular cases, however, the decentralized model can provide subsidiaries and – consequently – headquarters a boost in competitiveness in international environments. The differences, e.g. benefits and disadvantages of such organizational models were demonstrated in a study that made a comparison between the organizational models of Philips and Matsushita, where Philips had initially a more decentralized model, while Matsushita adopted a centralized one (Bartlett, 2006, 2009).

In emerging economies, such as Brazil, it is necessary to assure a qualified presence in the so-called knowledge global economy. For such, two items seem to be essential: one of them refers to the Brazilian companies that internationalize, learning and developing new competencies in a global pattern; the other item is related to subsidiaries of foreign multinational corporations that operate in Brazil (Oliveira Jr et al., 2009a).

Considering that we intend to explore herein the importance of Brazilian multinationals abroad, it is necessary to present a brief perspective regarding some relevant characteristics of subsidiaries and headquarters: strategic relevance of the subsidiary, autonomy and integration with headquarters. Such items will be approached in the following subsections.

2.1.2.1 – Strategic relevance

The main challenge for subsidiaries operating in large emerging economies is to have their specific competencies understood and recognized by the headquarters. In order to become a subsidiary with high strategic relevance for the corporation, it is necessary to reach for the acknowledgement of the headquarters and allocation of resources, especially with regard to Research & Development (R&D), which is an essential competency in strategic subsidiaries operating in Brazil (Oliveira Jr et al., 2009a). It is important to point out that the increasing costs involved in R&D expenditures and the reduction of the life cycles of new technologies make companies look for a larger global volume in order to pay for high investments (Bartlett & Ghoshal, 1992).

Once companies get involved in exploring the existing knowledge within the multinational corporation besides learning from countries in which they operate, one notices the emergence of innovation, which is also related to R&D activities (Oliveira Jr et al., 2009a). That way, regarding global companies, the innovation process is usually divided into two aspects: the first one refers to the process of centralized innovation, in which the resources of the headquarters are used for the creation of a new product or process, which would be subsequently explored in a global scale; the second aspect involves local innovation, in which subsidiaries used their own resources and abilities to create innovations aiming to meet local needs (Bartlett & Ghoshal, 1992). The process of innovation in a transnational company, however, indicates the development of local promotion and global connection.

Illustration 8 - Innovation processes in a transnational company

Source: Based on Bartlett and Ghoshal (1992).

It is possible to affirm, however, that companies that gained competitive advantage over their rivals used an innovative recombination of knowledge. The process of knowledge transfer, e.g. from headquarters to subsidiaries operating in other continents, can be hindered due to cultural and geographic distances, as it will be mentioned in Section 2.2. However, the real value of such knowledge transfer in international markets is high, since such markets provide new ideas that can be applied in other countries (Bresman, Birkinshaw & Nobel, 1999).

The knowledge transfer, which can also be a method used to promote innovation, is strongly linked to the relationship between headquarters and subsidiaries, in which the autonomy of subsidiaries are explored in order to understand the development of their own competencies.

When a subsidiary acquires relevant strategic importance, it starts to command regional or global functions, receiving not only the knowledge provided by the headquarters and other subsidiaries, but also being responsible for the implementation of organizational capacities in the country where the subsidiary operates or even in other

parts of the world. That way, the subsidiary starts being responsible for developing and transferring knowledge for other subsidiaries, while encompassing functions of the headquarters (Borini et al., 2011).

The relative autonomy of subsidiaries is an important feature related to the creation and dissemination of innovations and competencies. It is possible to infer, therefore, that the higher the level of centralization, the lower the power of generating innovation. Such statement can also have some sort of relation to SOI, which is the one kind of innovation that we intend to address in this study. The development and presence of SOI, for instance, could indicate that subsidiaries of Brazilian multinationals tend to have a more autonomous than centralized behavior. Subjects involving CSR in multinationals will be explored in Section 2.3.3.

Either way, when the strategic relevance of a subsidiary is established and recognized, the autonomy in competence areas is lower, since autonomous subsidiaries do not tend to act in integrated ways, which is essential for the strategic alignment of processes, activities and strategic guidelines among headquarters and other subsidiaries (Oliveira Jr, 2009a).

Autonomy is essential for the development of the activities of the subsidiary. Nevertheless, the higher the degree of autonomy, the more harmful the activities between the subsidiary and the headquarters will be, since there is the risk that the subsidiary might develop projects that are not integrated with the objectives of the headquarters, e.g. corporation as a whole. On the other hand, the lower the degree of autonomy, the larger the domination and control held by the headquarters. Therefore, it is possible to conclude that the integration between headquarters and subsidiaries go beyond the establishment of autonomy and integration between them; it is related, also, to the communication between the headquarters and the subsidiary and among subsidiaries (Oliveira Jr et al., 2009a).

The concepts that involve autonomy and integration, which are very important to understand the relationship between headquarters and subsidiaries, will be discussed in details in the next topic. These concepts are based, mainly, on studies developed by Birkinshaw et al. (1998) and Ghoshal & Nohria (1989).

2.1.2.2 – Autonomy of subsidiaries

In order to deepen the analysis on issues regarding the autonomy developed by certain subsidiaries, we will use some constructs proposed by Birkinshaw, Hood & Jonsson (1998), since we consider their research relevant when it comes to issues related to autonomy and centralization in multinationals.

The authors explain that subsidiaries, over the last years, started to play an important role regarding the development of specific advantages for the corporation as a whole. Nevertheless, only in the 1980s subsidiaries started to present innovative ideas, developing researches and becoming active participants in the formulation and implementation of strategies (Birkinshaw; Hood & Jonsson, 1998).

That way, considering the activities attributed to subsidiaries, they can lead or take part in innovation projects, they can create resources for the rest of the corporation and they can achieve a certain degree of independence that allows them to develop and manufacture certain products globally. The subsidiary that contributes substantially for specific advantages of the company is known as strategic leader or active subsidiary. The subsidiary that does not contribute for such advantage is called implementing or branch (Ibid.).

It is believed that subsidiaries have control over their fortunes and can be very useful in developing characteristics that can lead them to a great autonomy though global mandates – that way, they can proactively expand their roles within the organization (Morrison & Roth, 1993).

Regarding the subsidiaries of multinational corporations, it is possible to find in the literature three different perspectives (Birkinshaw et al., 1998). The first perspective refers to the environmental determinism; in other words, the subsidiary has to consider the particular characteristics of the host country. The second one points out to restrictions imposed by the headquarters, whose function is to define valid strategies for the corporation as a whole, establishing how subsidiaries have to play their roles. The third refers to the choice of the subsidiary; in other words, the managers of the subsidiary are

capable of understanding the current situation and needs of the local market, being in better position to decide which role the subsidiary should play. The latter perspective indicates that the subsidiary, in order to operate with greater autonomy than in the other two perspectives, should develop its own resources and capacities, encouraging aspirations of managers and the commitment of employees.

It is important to mention that, the greater the strategic relevance of a subsidiary, the lower its autonomy, since autonomy tends to decrease due to the integration of the activities of the subsidiary with the corporate chain of other units (Oliveira Jr et al., 2009b).

There is also a relationship between the size of the subsidiary and its autonomy. If a subsidiary is considered small, for instance, and focuses its activities on the needs of a local market, then its internal operation becomes not very important for the corporation as a whole. However, when the growth of the subsidiary implies in an increase of resources, the control imposed by the headquarters tends to decrease, which is an attitude that demonstrates a strategic choice made by the subsidiary. The lack of initiative of a subsidiary can be due to a negative reception of such attitudes by the headquarters or to the lack of ability to create initiatives. Without initiatives, the subsidiary can develop resources and acquire international responsibilities, but with the influence and participation of the headquarters' managing staff (Birkinshaw et al., 1998)./

The resources of a subsidiary can be classified as restrict to the local of operation, when they are limited to the geographical area of operations, or as non-restrict to the local of operation, when they are influenced by the corporation to operate in other countries. These resources can contribute for the generation of advantages for the corporation and they occur according to three criteria. The first criteria analyzes the value of the resources; in other words, resources demand specialization, and tend to become superior in relation to the ones that already exist in the corporation. The second one refers to the acknowledgement provided by the headquarters; such acknowledgement relates to accepting the resources developed and offered by the subsidiary in other parts of the multinational corporation. Lastly, the third criteria refers to the transfer or influence of these resources in the organization. It is important to point out that resources are not easily transferred within the corporation (Ibid.).

In order to promote the development of these resources, the subsidiary tends to create a leadership and entrepreneurial culture, items strongly related to the existence of a subsidiary initiative, defined by Birkinshaw et al. (1998) as the search for opportunities in international markets, in which it is possible that the subsidiary applies its specialized resources.

The contribution made by a subsidiary is measured by the acknowledgement provided by the corporation regarding resources. That way, the relationship headquarters-subsidiary plays an important role in the emergence of initiatives. The autonomy of the subsidiary has a particular important influence on the initiative and on the role played by contribution; the communication between headquarters and subsidiaries, on the other hand, presents only a little positive impact. If initiatives want to be taken by the headquarters, they need to be aligned with the current strategy of the corporation (Ibid.).

In global operations, the subsidiary takes over responsibility and strategic control of the whole production line of a determined good or service. That way, instead of aligning the control from headquarters over subsidiaries, production starts being segmented by lines of product and distributed among subsidiaries. Then, the subsidiary starts to develop a certain degree of autonomy and the ability to control its own destiny, which provides them with the development of specific competencies (Morrison & Roth, 1993).

Roth & Morrison (1992) emphasize such statements by affirming that the responsibility of a subsidiary for strategic decisions does not demand a complete autonomy, since the subsidiary should remain interdependent not only in relation to other subsidiaries, but also to the headquarters.

It is therefore possible to conclude that subsidiaries with a certain degree of autonomy can guide the development of advantages instead of only contributing in a passive way.

2.1.2.3 – Integration between headquarters and subsidiaries

In order to interpret correctly the concept of integration, it is necessary to comprehend some considerations about the relationship between headquarters and subsidiaries. The study accomplished by Ghoshal & Nohria (1989) indicates that the internal structure of a multinational corporation, defined by them as an organization composed of several units, will never be homogenous; it needs to adapt to the contexts of their different national subsidiaries. The internal structure limits and is limited by the dependence and interdependence in exchange relationships.

In the case of subsidiaries, it is important to analyze two basic dimensions: the geographic localization of activities (e.g. R&D, marketing and production) and the degree of integration among the activities accomplished by the headquarters and by other subsidiaries of the corporation. The subsidiary that accomplishes most part of the activities of the value chain has two options: they can become highly autonomous from the headquarters by commercializing products and services in the country in which it operates or it can be very integrated to the headquarters, exporting part of its products and services to the headquarters or to other subsidiaries, while importing products and services from them (Jarillo & Martinez, 1990).

Regarding constitutive elements, it is possible to affirm that centralization (absence of autonomy of the subsidiary in the decision-making process), formalization (use of rules and systematic procedures in decision-making processes) and normative integration (consensus and shared values acting as basis for decision-making processes) constitute the structure between headquarters and subsidiaries.

The authors define the concept of centralization as a governance mechanism in which the decision-making process is organized hierarchically. Therefore, it is up to the headquarters to accomplish strategic and political decisions. Once that the centralization directs the focus of actions for the headquarters, dissonances can come up if the subsidiary is relevant for the exchange relationship. It is possible to infer, consequently, that the higher the dependence of the subsidiary from the headquarters, the higher the centralization. It is also possible to affirm that the higher the relationship of interdependence, the higher the centralization, since in this sort of relationship,

competencies and perspectives – from the headquarters' point of view – are the ones that impose, limiting the exchange relationship.

The formalization, on the other hand, is interpreted as a routine of decision-making processes and allocation of resources. Therefore, the higher the level of formalization, the lower the power of the headquarters and subsidiary, because it restricts the exchange relationship due to impersonality. The formalization is positively related to situations of potential conflicts and to the degree of interdependence, since it provides a structured context for reciprocity.

The normative integration, however, predicts consensus and shared values by grouping purposes of the subsidiary and the headquarters in only one inclusive and shared goal. This sort of integration facilitates the cooperation and turns the decision-making process into a more participative element. One can notice, therefore, a positive correlation between integration and interdependence.

Regarding the costs and effectiveness of each one of the concepts, one can affirm that normative integration is the most expensive administrative mechanism. The advantage, however, is the ability of combining resources and competencies of the involved players in the exchange relationship, enabling the organization to benefit from the complementarities of these competencies. The formalization, *au contraire*, is a less expensive mechanism and requires less administrative resources to be institutionalized and, once established, it requires less administrative energy to run. The centralization is the less expensive mechanism because it enables administration by means of authority. With such method, the decisions accomplished by the headquarters reflect the competencies available in the headquarters, disabling supplementary and complementary competencies of the subsidiary.

Choosing the most efficient structure in the relationship headquarters-subsidiary does not imply in the sum of the structural patterns proposed by each model, but the combination of elements that indicate a balance between the costs of each element and its effectiveness in a certain context (Oliveira Jr., 2009a).

When a subsidiary is committed to accomplishing most part of the functions of the value chain in a relatively independent way from the headquarters or other subsidiaries, it is possible to affirm that such subsidiary is more likely to be developing an autonomous strategy. However, if these functions are accomplished in the country in which it operates and highly integrated to the rest of the company, then it is possible to affirm that the subsidiary is following a strategy known as receptive. Lastly, when accomplishing several activities in the country in which it operates with strong coordination with the rest of the corporation, then it is possible to affirm that the subsidiary follows an active strategy. Most of the subsidiaries of integrated multinational corporations develop receptive strategies (Jarillo & Martinez, 1990).

It is possible to point out, however, a relationship between integration and autonomy: a strong relationship between the headquarters and subsidiaries can also indicate a form of control, limiting innovation and strategic activities. For our study, it might be possible to assume that if subsidiaries of Brazilian multinationals develop SOI abroad, then they probably do not have a strong relationship with the headquarters in Brazil. The ideal structure of a strategically relevant subsidiary would indicate a low degree of formalization, a moderate degree of centralization and a high degree of socialization with the other units of the multinational corporation (Oliveira Jr et al., 2009b).

2.2 – EMNCs, Global Latinas & Brazilian multinationals

2.2.1 – Emerging market multinationals

Emerging countries became quite popular over the past years. It is not difficult to see a shift in the paradigms of the world economy, which redirects its focus from developed economies to emerging markets. However, why did such shift occur? What made these countries so attractive for the world economy?

In order to explain what the term “emerging market” stands for, Lassere (2012) explains there is no clear definition about the meaning of this expression. According to him, this term is normally used to refer to countries that present concurrently a high economic growth, an increasing development of a middle class, a high degree of infrastructure, and the opening of their market to international trade and investment. In this study, we will refer to companies originated from emerging markets as “emerging market multinational companies” (EMNCs) or, simply, as “emerging market multinationals”.

Illustration 9 - Definition of emerging markets

Source: Based on Lassere (2012).

Losada-Otálora & Casanova (2014) emphasize the importance of exploring and understanding the phenomenon of emerging market multinationals, considering that over the past ten years the increasing involvement of such companies in the global economy has been remarkable; these companies are considered the new force of the global economy.

For multinational companies, emerging countries can be a source of opportunity, even though they present a different institutional environment when compared to OECD countries (Lassere, 2012). It has not been, however, always like this. Even though multinationals from emerging markets are causing a revolution in many industries while threatening developed country companies, many American and European companies underestimate the competitive threat from EMNCs (Ramamurti, 2012). As an example, Ramamurti (2012) quotes the Huawei case, a Chinese telecom equipment company that came up initially by selling public telephone exchanges to small and medium-sized companies in rural China. The company, then, expanded its operations, entered into

several technology alliances with western companies, and expanded into other emerging markets, becoming the most relevant telecom equipment company in the world.

EMNCs are expanding and conquering different markets in different countries, as the above example indicates, but there are certain factors that motivate this urge of going beyond borders. Gaur & Kumar (2010) affirm there are several motives why these companies internationalize. One of these motives can be related to overcoming small scale in the home market (e.g. acquiring globally competitive scale), accessing new raw materials or knowledge, and the use of FDI in order to overcome export barriers. These authors also emphasize that entering developed country (and/or high-tech) markets can be an attempt to acquire the legitimacy that the company lacks or to overcome negative country-of-origin label. Other companies internationalize in order to escape from regulatory constraints in the home market or due to misalignments between the company's capabilities and the home institutional environment.

Cuervo-Cazurra & Ramamurti (2015) seem to agree with such statements, emphasizing that outward foreign direct investment (OFDI) can be treated as scape investments, which occur due to the desire to escape the home country's weak institutions and economic underdevelopment. That way, weak institutions in emerging markets are responsible for causing OFDI since laws can be ambiguous in such markets or their enforcement can be weak. In non-democratic – and/or countries marked by strong corruption – countries, the judiciary may be subordinate to politicians, enabling the emergence of unpredictable political forces.

Gaur & Kumar (2010), however, mention other different – but complementary – motives for the internationalization of emerging market companies. They believe that risk diversification, exploiting experience with labor-intensive technology, social network through ethnic ties, small home markets, and acquisition of management expertise in marketing, technology and general management can be motivating factors. According to these authors, the internationalization of developed market companies are marked by threats to existing markets, exploiting experience with high-technology production, and exporting back to developed home markets. There are, however, remarkable differences between the motivation of developed and emerging market companies for

internationalization. Korean construction companies, on the one hand, when investing in foreign markets, use domestic Korean work force, which is considered a motivation for FDI as an international strategy; developed market companies, on the other hand, tend to focus on the reduction of production costs through low wage workers. Indian software companies, like Korean construction companies, see the exports of software professionals to foreign affiliates as an internationalization strategy.

When referring to common characteristics among EMNCs, Losada-Otálora and Casanova (2014) affirm that these companies are poor resources-endowed when compared to developed country multinationals and acquisitions are the preferred entry modes. The main purpose of cross-border investments of EMNCs is to overcome resource scarcity, especially technological resources; in other words, the pursuit for such resources can be considered a motivation for these companies to operate abroad.

Cuervo-Cazurra and Ramamurti (2015), while addressing the issue of motivations for EMNCs, mention that internationalizing is a way for managers to reduce the negative country image that emerging markets provide, which can negatively affect the international competitiveness of companies. The authors call it discrimination escape, which may arise from several factors, such as (i) the assumption in developed countries that emerging market products are produced by exploited labor; (ii) emerging market products present inferior quality when compared to products manufactured in developed countries, since emerging countries tend to be less sophisticated in terms of technology or have lower product-safety standards; and (iii) companies from emerging markets present higher risks, since they are involved in macroeconomic volatility and poor corporate governance standards. Due to such assumptions, EMNCs tend to shift operations to developed countries.

The stereotypical features related to EMNCs is the reason why developed countries tended to underestimate the relevance of such companies. In accordance with Cuervo-Cazurra & Ramamurti (2015), Ramamurti (2012) mentions that developed countries tend to believe that EMNCs are technologically backward, with unsophisticated products, run inefficient plants, know little about marketing, and lack international experience. That way, developed markets presume that EMNCs should only exploit activities related to making cheap product, since labor tends to be cheaper in these countries. The author mentions that EMNCs are perceived as risky by developed markets

because they are or were once involved with weak political institutions, corruption, social tensions, overreliance on natural resources, and degrading natural environments (Ramamurti, 2012).

Despite similar the characteristics of EMNCs, Pattnaik & Kumar (2014) believe that the adoption of pro-market economic reforms in the last two decades seems to be the real driver of emerging market economies towards internationalization. The economic reforms transformed the institutional context for companies to internationalize, expanding their business to access a larger customer base.

One forgets, however, that the capabilities acquired by EMNCs in their home markets are of value in other emerging markets, which turns them into competitive companies (Cuervo-Cazurra & Ramamurti, 2015). As mentioned by Lassere (2012), the pace of the development of emerging countries surpasses the rest of the world, where the BRICs countries (Brazil, Russia, India and China) are the fastest growing, with China taking the lead. The economic development of these countries, based on the presence of a strong middle class, investment in infrastructure, and opening of markets to international trade and investment, seems to provide relevant market opportunities. The middle class, for instance, demands for fast-moving consumer goods, as well as consumer durables, which creates demand for intermediate products and natural resources along the value chain.

Prahalad (2010) emphasizes that emerging countries tend to have an expressive part of the population located at the lower end of the income pyramid, a.k.a. bottom of the pyramid. According to him, this population is also willing to purchase products that offer good quality, but cheaper and less sophisticated. Since this population tends to believe that they might soon become middle class, companies need to capture such market opportunities. That way, in emerging countries, multinationals tend to adopt a two-pronged strategy: one for the middle class and one for the bottom of the pyramid (Lassere, 2012).

Anyway, companies from emerging markets, which now play an increasingly important role in the global economy, successfully responded to opportunities and challenges imposed by pro-market economic reforms by pursuing growth opportunities

at domestic and global level. In the domestic market, these companies successfully compete with other foreign companies; internationally, they expand through cross-border mergers and acquisitions (M&A) (Pattnaik & Kumar, 2014). The authors mention that, in 2010, for instance, the cross-border M&A by emerging market firms reached approximately 20% of the total number of deals and 30% of the total deal value. Losada-Otálora and Casanova (2014) affirm that although EMNCs tend to acquire new resources as an internationalization strategy, some companies also exploit and defend their resources abroad.

Even though emerging economies have to face several risks when internationalizing, developed country companies are also going through hard times, which can also have favored the emergence of EMNCs. Ramamurti (2012) mentions that developed markets face strong fiscal imbalances, out-of-control entitlement programs, aging infrastructure, rising income inequalities, and adverse demographic trends. Economies that were considered the most powerful ones – Japan, Europe, and the United States – are in decline for four decades; the 2008 financial crisis did contribute for such scenario. This is why emerging economies are expected to grow faster than developed countries in the next two or three decades. Conforming to Ramamurti (2012), emerging economies will count for two-thirds of the world's future gross domestic product (GDP), which will enhance the competitiveness of EMNCs, while turning them into strategically important institutions.

Pattnaik & Kumar (2014) explain that the adoption of pro-market reforms in emerging countries enabled the presence of foreign MNCs operating there through subsidiaries. The presence of such multinationals increased the competitive intensity for domestic companies, which turned internationalization as a response mechanism to institutional changes at home. Emerging market companies had to, therefore, expand into international markets in order to acquire strategic assets to compensate for their latecomer disadvantages. EMNCs usually lack strategic assets and expand into international markets at an accelerated pace.

In fact, Losada-Otálora and Casanova (2014) disagree to the statement that emerging market multinationals are “resource laggards”¹; they believe that these multinationals developed in their home countries excellent tangible and intangible assets to explore abroad. Unlike previous studies present in the international business literature, EMNCs are not diminished companies without any or scarce resources; their strong brands and innovative capabilities are resources that leveraged the internationalization of some companies. The authors indicate there may be some sort of prejudice when it comes to resources and capabilities acquired by EMNCs, since they are considered less valuable than those created by traditional multinationals.

The evolution of EMNCs marked over the past few years a shift in the so-called powerful nations. Initially, in the 1960s, Asian companies (Japan, Hong Kong, Korea, Singapore, and Taiwan) challenged companies from the United States. Now it is possible to notice that companies from Asia, Latin America, Eastern Europe and Africa are the ones threatening stablished powerful American companies (Ramamurti, 2012). It is relevant to point out that the population of India and China (excluding Brazil, Russia and emerging countries) are more than 10 times the population of Japan, which implicates in a much larger consumer market.

The pro-market reforms, addressed by Pattnaik & Kumar (2014) enabled the presence of MNCs in emerging economies, as mentioned before. The presence of foreign and sophisticated multinationals could have caused the disruption of most national companies, but it did not occur. According to Ramamurti (2012), when emerging economies like Brazil and India opened up in the 1990s, their national companies discovered a home-field advantage because they had strategies that were well suited to the local environment. Such advantage indicates one of the most relevant features of emerging markets: they are strong competitors in their home markets, which are some of the largest and fastest growing in the world.

¹ Original quotation marks.

Even though investing abroad seems to be very beneficial for emerging market economies, Cuervo-Cazurra & Ramamurti (2015) propose that the governments representing these economies should try to reduce incentives to engage in escape OFDI by improving the domestic business environments. The authors believe that OFDI tends to reduce the competitiveness and sophistication of the internal market, since the economic efforts are towards foreign economies. The purpose of the reduction of escape OFDI would be to improve the general business climate and increase inward FDI, while supporting the upgrading of the competitiveness of domestic companies that want to internationalize based on the skills honed in the home market.

After emerging market companies survived the liberalization period (or pro-market reform), they acquired a set of characteristics that strengthened their competitiveness, making them ready to compete with companies from other emerging markets and even with companies from developed countries.

Gaur & Kumar (2010), for instance, mention that the entrepreneurial ability and networking skills of emerging market companies allow them to operate in harsh market conditions with little institutional support, since this is the scenario in which they had to operate in their home markets. This is, according to the authors, an ownership advantage when venturing into international markets. In the particular case of Latin American companies, the alliances established with developed market companies and the entrepreneurial mindset of going abroad provided them the opportunity to entry, compete and survive in developed economies.

In alignment with Gaur & Kumar (2010), Pattnaik & Kumar (2014) affirm that one of the distinguishing features of emerging market economies is their institutional context, which indicates the rules and regulations and informal norms and cultures for companies to operate in an economy. The institutional context in these countries tend to be characterized by lack of infrastructure and the regulatory and contract enforcement regimes are inefficient. In developed markets, such features may destroy the value of a company; but in emerging markets, these characteristics provide companies with a unique set of benefits.

It seems that, in a first moment, emerging market companies expanded into other emerging markets: Brazilian companies, for example, expanded into other parts of Latin America; India and Chinese into other Asian countries; South African into other African

countries. Since emerging companies were operating in other emerging countries, the products and prices brought from their home countries were suited to the needs of their neighbors (Ramamurti, 2012).

In order to demonstrate the competitive advantages and internationalization strategies of emerging multinational companies, Ramamurti (2012) analyzed several characteristics we will approach herein. Concerning the competitive advantages of EMNCs, the authors mention: (i) insight into customer needs, (ii) ultra-low cost production, (iii) frugal innovation, (iv) operational excellence in adverse environments, (v) privileged access to resources and markets, and (vi) traditional first mover advantages.

With regard to the first competitive advantage, insight into customer needs, EMNCs tend to keep products cheap, making them sturdy and portable; in other words, companies need to focus on developing products that are simple to use and maintain. Such approach is related to the affirmation drawn by Prahalad (2010), in which he suggests that companies target at the poorer segments of society in order to attend customers' needs while exploring this new market opportunity.

The ultra-low cost production indicates that companies have to deliver products at price points that customers from developing countries can afford. That way, EMNCs have to be creative at cost reduction, while taking into account the quality of the products they provide. In order to fulfil this goal, companies tend to economize on space, capital equipment, land, and construction costs, while locating facilities in second-tier rather than first-tier cities. If acquiring original machinery from developed countries indicates an increase in the price of the products and/or services they provide, they are more likely to use second-hand machines or even to make replicas.

The two items mentioned above are somehow related to frugal innovation. EMNCs have relevant skills in frugal innovation, since they have to come up with new products quickly and cheaply in order to survive. Doing so, they accomplish the previous objective by proving cheap products, while attending local costumers' needs. As an example, Ramamurti (2012) mentions the occasion in which Chinese firms started producing lithium-ion batteries at ambient temperature while using less expensive inputs. Gaur & Kumar (2010) affirm that EMNCs are innovating specifically for emerging

market consumers; some of these companies are quicker in adopting new innovative business models than developed market companies.

As mentioned by Gaur & Kumar (2010), Pattnaik & Kumar (2014), Cuervo-Cazurra & Ramamurti (2015) and Lassere (2012), EMNCs managed to develop operational excellence in adverse environments. Such ability in operating effectively in harsh business environments is due to the institutional constraints these companies had to face initially when operating in the home market. In other words, when infrastructure is weak and logistics are difficult, EMNCs find ways to compensate.

Since many emerging countries have natural resources for exploitation, it is possible to affirm that this is a competitive advantage for EMNCs. Many companies located in Europe or in North America lack of determined natural resources and need to establish commercial agreements in order to purchase or to explore them elsewhere. Even though most EMNCs are late movers in their industries (as emphasized by Pattnaik & Kumar, 2014), some of these companies took the lead in new industries to become first movers. In such cases, EMNCs tend to develop the ability to integrate cutting-edge technologies acquired from developed countries in order to fulfil this goal.

Internationalization is a way through which EMNCs strengthen their competitive advantages, since internationalization is used to exploit home-based competitive advantage, while acquiring new competitive advantages for exploitation at home and abroad. As such, Ramamurti (2012) indicates some internationalization strategies adopted by emerging market companies: expanding into other emerging markets; becoming an offshore partner; building scale in mature industries; integrating vertically in natural resources; and acquiring complementary assets.

Expanding into other emerging markets may relate to statements drawn by researchers in the previous section of this thesis. According to Ghemawat (2008) and Lassere (2012), a country tends to internationalize, at first, into countries with lower cultural and geographical distances. EMNCs tend to use products and processes optimized for their home markets in other emerging markets. Becoming an offshore partner seems to be a viable solution for EMNCs that intend to internationalize, since they go abroad to take advantage of their ability to produce low-cost products, components, or services for customers in high-cost countries.

Industries considered mature in developed countries (e.g. cement, steel, aluminum, auto parts, personal computers, beverages) are usually considered high-growth in emerging economies. In order to build scale in this sort of mature industries, EMNCs have grown in size, added new plants, and upgraded technology. By using this kind of strategy, emerging companies can learn from mature industries located in developed countries and can become leaders in their home markets with strong cash flows, while acquiring companies in different countries.

Some EMNCs integrate vertically in natural resources as an internationalization strategy. That way, emerging companies from countries with abundant natural resources, e.g. Brazil and Russia, integrate forward into Europe or North America, while EMNCs from countries with large demand of natural resources, such as China and India, integrate backward to secure natural resources. Lastly, companies from emerging countries that internationalize tend to acquire complementary resources in order to enhance their competitiveness in their home markets and abroad.

Table 6 - Advantages and strategies of EMNCs

<i>Competitive advantages</i>	<i>Internationalization strategies</i>
<ul style="list-style-type: none"> - Insight into customer needs - Ultra-low cost production - Frugal innovation - Operational excellence in adverse environments - Privileged access to resources and markets - Traditional first-mover advantages 	<ul style="list-style-type: none"> - Expanding into other emerging markets - Becoming an offshore partner - Building scale in mature industries - Integrating vertically in natural resources - Acquiring complementary assets

Source: Based on Ramamurti (2012).

Gaur & Kumar (2010), in line with Ramamurti (2012), affirm that a weak institutional environment in host countries marked by political instability is a motivation to invest and benefit from being first-movers in other developing countries. Besides,

according to the authors, it is possible to affirm that EMNCs are at a competitive advantage in comparison with developed market companies when entering and operating in other emerging markets. EMNCs are companies with a certain experience in their home countries when it comes to operating with underdeveloped institutions and difficult governance conditions, which indicate a valuable and inimitable capability.

Illustration 10 - Drivers for internationalization

Source: Pinto (2017).

The illustration above indicates roughly how negative characteristics of the institutional environment of emerging countries can contribute for the internationalization of their companies. In this example, internal constraints, market by harsher institutional environments and ineffective infrastructure, are the engine that motivates emerging market companies towards internationalization. When internal obstacles start being considered as a source of competitiveness instead of a negative aspect, EMNCs tend to operate in international markets with an advantage over developed market companies, which are usually not characterized by problematic institutional and infrastructure issues. That way, it is possible to affirm that internal constraints can be motivating factors for emerging market companies.

Several characteristics regarding emerging economies and emerging market companies have emerged herein, but there was not much information about the BRICs.

When addressing subjects related to emerging markets and emerging market companies, one cannot avoid thinking about the acronym “BRIC”. Wilson and Purushothaman (2003) used this term in 2003 when referring to Brazil, Russia, India, and China regarding their high GDP growth rates. That way, due to such high GDP, these countries were likely to become more and more important in the world economy. Wilson and Purushothaman (2003) published an article emphasizing that over the next 50 years, the BRICs economies could become a much larger force in the world economy.

It is common to find in the literature other initials in order to refer to such emerging market economies; some included South Africa (BRICS) in the group, while other researchers excluded Russia (BIC) for considering that the economy of this country is purely based on natural resources, unlike the others (Nölke, 2012). In this research, we will stick to the term brought up by Wilson and Purushothaman (2003): BRIC.

Lassere (2012) affirms that since 1993 it is possible to observe a decline in the global market shares of exports in goods from advanced industrialized countries, which coincides with the emergence of these new global players. The author mentions that these countries have common features, such as large territories and populations, low-income levels, fast economic growth and the emergence of a prosperous middle class, as mentioned before. Brazil and Russia seem to be the countries that rely mostly on commodity price rises, while India and China are more inclined to rely on low labor costs to take market share in services and manufacturing from advanced industrialized economies.

Even though the overreliance on natural resources is a common characteristic of most emerging economies, such scenario has been slowly changing. As an example, it is possible to mention a shift in Brazilian multinationals, which tend to focus on manufactured goods. The table below demonstrates the industries in which the ten largest Brazilian multinationals operated in 2010.

Table 7 - The ten largest Brazilian multinationals in 2010

<i>Company</i>	<i>Industry</i>
<i>JBS</i>	Meat processing
<i>Gerdau</i>	Steel production
<i>Ibope</i>	Marketing and advertising research and audience measurement
<i>Metalfrio</i>	Refrigeration
<i>Odebrecht</i>	Engineering, construction, chemicals and petrochemicals
<i>Marfrig</i>	Food processing
<i>Vale</i>	Metals and mining
<i>Sabó</i>	Automotive equipment
<i>Tigre</i>	PVC solutions
<i>Suzano Papel e Celulose</i>	Pulp and paper

Source: Based on FDC (2010).

It is possible to notice that from the ten largest Brazilian multinationals in that year, five of them were somehow related to natural or primary resources (JBS, Gerdau, Marfrig, Vale and Suzano Papel e Celulose). In 2016, however, the ten most internationalized Brazilian companies seem to be inserted in different industries, such as IT and manufactured equipment. That way, only three companies are more related to natural or primary resources (Intercement, Gerdau and JBS).

Table 8 - The ten largest Brazilian multinationals in 2016

<i>Company</i>	<i>Industry</i>
<i>Fitesa</i>	Nonwoven fabrics
<i>Iochpe-Maxion</i>	Wheels and structural components for vehicles
<i>CZM</i>	Machinery for foundation
<i>Intercement</i>	Production of cement
<i>Stefanini</i>	IT solutions
<i>Artecola</i>	Adhesives, engineering plastics and personal protective equipment (PPE)
<i>Gerdau</i>	Steel production
<i>JBS</i>	Meat processing
<i>Metalfrio</i>	Refrigeration
<i>Grupo Alumini</i>	Aluminum equipment

Source: Based on FDC (2016).

The reliance on natural resources is, nevertheless, not a necessarily negative feature for emerging market multinationals, e.g. BRICs. Lassere (2012) indicates a symbiotic relationship among the BRICs, since a high demand for raw materials in India and China boosts the GDP of Russia and Brazil. That way, China Brazil and India are likely to become dominant global suppliers of manufactured goods and services and Brazil and Russia the dominant global suppliers for raw materials.cBrazil is the only country placed in both extremes; it can become a global supplier for raw materials and of manufactured goods. That way, it is believe that the BRICs have the potential to form a powerful economic and political bloc to challenge the modern economic organization. The table below demonstrates the growing importance of the BRICs in the world economy.

Table 9 - Share of the BRICs in the world GDP (%)

Source: World Bank (2016).

Despite the extremely high GDP growth of the BRICs economies, the current growth is not as high as it used to be in the past. From 1997 until 2015, the average GDP growth (annual %) of the BRICs was 5.6%; in high-income countries, the average GDP growth in the same period was 2%; in the Euro area (Western Europe) it reached only 1.5%; in the whole world, the average growth was 2,9% (World Bank, 2016). However, after the financial crisis of 2007-2008, the GDP growth of the BRICs in 2009 reached

only 2.45%; in high-income countries, -3.4%. It is possible to affirm, therefore, that despite the financial crisis, BRICs economies seem to present better results in terms of growth than developed, e.g. high-income countries. Over the past few years, especially in 2015, the GDP growth in the BRICs decreased drastically, especially in Brazil and Russia. In the Brazilian case, such event can be related to the political crisis occurring from 2014 onwards, which had effects on the national economy.

Table 10 - GDP annual growth in the BRICs from 2010 until 2015

Source: Elaborated based on data presented by the World Bank (2016).

Therefore, the information presented in this topic enables to state that EMNCs are a reality in the current world economy. These companies can disrupt existing developed market companies because they come from countries that have different resources, capabilities, and factor costs, which can provide them with a competitive advantage (Ramamurti, 2012). Since EMNCs are companies that used the strategy of linking up with other players to learn and leverage from their relationships (Gaur & Kumar, 2010), they tend to use acquired knowledge to become companies with global scale, but with significant lower costs than developed country rivals (Ramamurti, 2012).

2.2.2 – Multilatinas

If Latin American companies, e.g. multinationals, can also be considered emerging market companies, why is there a differentiation between EMNCs and the so-called *multilatinas*? According to some authors (Casanova & Fraser, 2009a, Casanova & Fraser, 2009b; Fleury & Fleury, 2012; Casanova, 2015a), Latin American companies share a set of common characteristics, which enables researchers to treat them as a separate group, even knowing that Brazil is part of the BRICs. Despite the fact that these companies are all located in the same continent with a smaller geographical difference between one another, the institutional environments provided by the local governments can also be similar.

Lourdes Casanova, a much-quoted author in such matter, refers to these Latin American multinationals usually as “Global Latinas” and defines them as privately-owned Latin American-based multinational companies “with operations on at least one other foreign continent and which generates, with the exception of ‘emerging’² firms, a minimum of US\$500 million in annual revenues” (Casanova & Fraser, 2009a, p.3).

Even though Casanova (2015a, 2015b, 2015c, 2015d) refers to these companies as “Global Latinas”, we chose to address to them as “multilatinas” because it is in line with the definitions and nomenclatures we use herein. Fleury and Fleury (2012), which refer to these companies as multilatinas, define them simply as multinationals originated from Latin America.

Casanova and Fraser (2009a) emphasize there is a need to deepen analyses on multilatinas because they are aggressive and globe-conquering companies that are reshaping the dynamics of global economy; Latin American firms came out of the shadows and are positioning themselves globally. The authors affirm that multilatinas

² Original quotation marks.

attracted attention only in the 1990s, but it is currently possible to observe a more aggressive expansion of these companies, as well as their strategies on a global scale.

Before exploring issues related to the drivers for internationalization and characteristics of multilatinas, it is important to provide information regarding the historical context from which these companies emerge.

The first multilatinas were Argentinian companies, which, during the 19th century, had the urge to expand their operations into neighbor countries, such as Uruguay, back then considered the “Switzerland of South America”, and Brazil, a country essentially agrarian. During the 1970s, however, it was possible to observe new internationalization attempts since Brazilian and Argentinian companies were starting to operate abroad, even though in a very modest manner (Fleury & Fleury, 2012). Casanova and Fraser (2009a) agree with such statements and explain that the internationalization of Latin American multinationals had four phases; in the first two (in the 1970s and 1980s), there was nothing but a modest sign of internationalization.

In the third phase of internationalization, Latin American companies seem to be stronger and ready to compete with other companies abroad (Fleury & Fleury, 2012), presenting more ambitious global expansion patterns (Casanova & Fraser, 2009a). Between the end of the 1980s and beginning of 1990s, the structure of industrial segments of Latin American countries were affected by the openness and deregulation of the economy and by the privatization of state-owned companies; the countries of the region ended up adopting industrial policies that led to deep structural changes in microeconomic terms. Such changes resulted in a significant increase of inward FDI (Fleury & Fleury, 2012). The fourth and last phase, starting from 2002 onwards, was marked by increasing commodity prices and high growth rates, which fostered a stronger global expansion by Latin American companies (Casanova & Fraser, 2009a).

In order to illustrate the phases through which multilatinas went through, Casanova and Fraser (2009a) separate these phases by providing the particular characteristics of each one of them.

The first phase, which occurred from 1970 until 1982, was marked by the emergence of FDI in the region. The authors emphasize that most of these FDI flows in Latin America were South-South investments; outflows were not very significant in this period. This first phase is important because it indicates the appearance of the first

multilatinas that aimed at neighboring countries in order to explore other markets in the region. The second phase (1982-1990) of the internationalization of multilatinas was known as 'the lost decade' due to several institutional problems occurring in Latin American countries. In 1992, Mexico defaulted on debt payments causing several negative effects on inward and outward FDI flows in the region. In Brazil, for instance, there was a strong decrease in the GDP growth combined with strong inflation rates. During that time, many Latin American corporations were closed down or bought by foreign multinationals, especially in sectors protected by import substitution policies.

According to Esteves and Feldmann (2016), the implementation of import substitution policies in Brazil during the military regime was not as successful as the initiatives in East Asian countries. In Brazil, there was no policy to preserve human resources involved in the technological and scientific progress. The end of the market reserve, likewise, did not give Brazilian entrepreneurs enough time to adapt to the new market conditions. As result of this new market condition, Casanova and Fraser (2009a) assert that, in the late 1980s, Latin American governments liberalized their economies through lower trade barriers, openness to foreign investment, and flexible exchange controls. Despite the downside this liberalization may indicate, the authors affirm that such changes provided Latin American companies with an incentive to improve their competitiveness and expand into other markets. Cyrino and Tanure (2009) agree with such statement, since they affirm that after the liberalization of the Brazilian economy, national companies became more competitive and willing to expand into other markets.

The third phase of the internationalization period (1990-2002) was strongly marked by the Washington Consensus, which was a set of economic policy prescriptions considered essential for countries going through economic crisis. It brought sweeping economic liberalization (especially privatizations) in industries such as telecom, utilities, gas, and steel. That way, many Latin American countries abandoned importation substitution policies in order to adopt pro-market strategies. The impact that these economic changes caused in Latin America provided national companies the initiative to consolidate their position domestically and regionally by pursuing efficiencies,

comparative advantages, and foreign financing. Such initiative also provided Latin American companies the chance to expand their operations internationally.

Lastly, the fourth and final phase corresponds to the year 2002 onwards. This phase was marked by a boom period of Latin American companies going abroad. Such boost was fostered by a raise in commodity prices, which strengthened resource-based Latin American companies. It was also possible to observe in such period an increase of outward FDI from the region, especially due to large-scale asset acquisitions abroad. The years between 2002 and 2012 are considered a golden decade for Latin America (Casanova, 2015c) because multilatinas thrived during boom times while engaging in poverty alleviation initiatives and sustainable development.

Illustration 11 - Phases of the internationalization of multilatinas

Source: Based on Casanova & Fraser (2009a).

It is not uncommon to find references on family-owned company when it comes to Latin America. The influence of family businesses in these countries are very important (Fleury & Fleury, 2014) and most Latin American companies belong to family-owned groups (Fleury & Fleury, 2012). However, why did family-owned businesses become a characteristic of multilatinas?

In order to explain this conundrum, Casanova and Fraser (2009a) affirm that such characteristic has deep historical roots. The Napoleonic system of French civil law adopted by Latin American countries provided less protection for minority shareholders and creditors when compared to the legal frameworks used in Anglo-American countries and Germany. The outcome of such system entails consequences still today, since the growth of capital markets was inhibited and remains small in relation to the size of regional economies.

This historical legacy is the reason why family-controlled companies emerged in Latin America. Since there were several obstacles to international expansion due to trade barriers and excessive control, family businesses had to expand almost exclusively into their domestic markets. That way, considering that companies had no choice but operate internally, they ended up becoming more closed and more focused on the needs of the domestic market. These companies usually have a highly conservative corporate culture, particularly with regard to debts; most Latin American companies have had relatively low levels of debt regarding total assets. When companies are not family-owned and/or family-controlled, they tend to be state-owned, especially in areas such as oil, metals, and gas – industries operating at the low end of the value chain.

Despite having family-controlled companies, one of the most common characteristics of Latin-American companies is that they are considered latecomers in international markets when compared to developed market companies (Cyrino & Tanure, 2009; Fleury & Fleury, 2007). Besides, multilatinas are companies that survived and thrived against multiple challenges, such as hyperinflation, currency devaluations, and stagnant growth (Casanova, 2015a). Losada-Otálora and Casanova (2014) still affirm that the institutional environment of Latin American countries are different from those of developed countries; that way, multilatinas have to create or acquire complex resources to dispute global leadership with traditional multinationals.

Regarding the common features of multilatinas, Fleury and Fleury (2012) mention eight characteristics: i) the subsidiaries of multinationals from developed countries played an important role in the process of industrialization of most Latin American countries; ii) Argentina, Chile, Mexico and Brazil are the only countries that have expressive multinationals operating abroad; iii) in accordance with Casanova and Fraser (2009a), most part of the multilatinas are family-owned; iv) the multilatinas originated from Spanish speaking countries expanded into other Spanish speaking markets – in other words, they developed business models addressed for the Latin culture; v) the expansion of multilatinas into Brazil favored manufacturing sectors, except for Mexican multinationals, which were more engaged with services (telecom, distribution, and retail); vi) the expansion of Brazilian companies into Latin America was guided by large,

medium and small-sized manufacturing companies; vii) the operation of multilatinas in Latin America is not influenced by global production networks – they are more related to the establishment of regional production networks; and viii) public policies had a relevant effect on the trajectory of local companies in terms of internationalization and performance of multilatinas.

Regarding the assumption that Argentina, Chile, Mexico, and Brazil are the only countries with an expressive number of multinationals operating abroad, we analyzed the ranking provided by América Economía (2016). When one company was controlled by two different countries, we considered these two countries separately. Indeed, Mexico, Chile and Brazil are the most expressive countries in terms of number of multinationals. However, contrary to what Fleury and Fleury (2012) affirm, Colombia has more expressive multilatinas than Argentina; that way, Mexico, Chile, Brazil and Colombia are the countries with the largest and most expressive multinational companies according to such ranking.

Illustration 12 - Latin American multinationals by percentage

Source: Based on América Economía (2016).

These multilatinas operate in different sectors and industries. Most of them, nevertheless, operate in the food industry (14%), followed by beverages (8%) and steel industry (8%). As mentioned before, it seems that Latin American companies operate in industries that are more related to primary sectors instead of high-tech segments. For the illustration bellow, we grouped the sectors “entertainment” and “media”, and “electric power” and “bio electric power”.

Table 11 - Multilatinas and the industries in which they operate

<i>Sector/Industry</i>	<i>Percentage</i>
<i>Food</i>	14%
<i>Beverages</i>	8%
<i>Steel</i>	8%
<i>Manufacture</i>	7%
<i>Airline</i>	6%
<i>Oil & Gas</i>	6%
<i>Entertainment</i>	5%
<i>Multisector</i>	5%
<i>Forestry</i>	5%
<i>Cement</i>	4%
<i>Technology</i>	4%
<i>Retail</i>	4%
<i>Automotive parts</i>	3%
<i>Electric power</i>	3%
<i>Finance</i>	3%
<i>Chemical</i>	3%
<i>Petrochemicals</i>	2%
<i>Telecom</i>	2%
<i>Construction & Engineering</i>	2%
<i>Mining</i>	2%
<i>Aerospace</i>	1%
<i>Health</i>	1%
<i>Agribusiness</i>	1%
<i>Logistics</i>	1%

Source: Based on América Economía (2016).

Casanova (2015b) mentions that the boost of the internationalization of multilatinas is related to – among other factors – the natural resources of the region. That way, having natural resources and being involved in primary sectors is not a downside for such companies. According to the author, the region is rich in natural resources and has cheap labor costs and other production efficiencies, so multilatinas do not need to go abroad looking for natural resources they lack at home, or to become more efficient by leveraging cheaper labor costs. However, multilatinas internationalize in order to acquire size, to compensate the economic volatility of home markets, and to access cheaper financing. The key driver for Latin American companies to go international is the pursuit of knowledge, considering that such asset enables them to remain competitive while enriching the with ideas that can be used back in the home market.

Despite the common downsides among multilatinas, e.g. protectionist policies (import substitution policies and tariff barriers), captive local consumers, weak capital markets, low levels of R&D investment, complex and unpredictable political environments, and market domination by family-owned businesses (Casanova & Fraser, 2009a), such features enabled them to compete first in the home market, and then to move abroad (Casanova, 2015a). Like EMNCs, the knowledge that multilatinas acquire in national markets makes them more efficient, innovative and flexible to adjust to different economic environments. In that case, downsides can turn into benefits, since they are push factors for the internationalization of Latin American companies.

However, several advantages can be strategically exploited by multilatinas. These companies have experience with low-income and price-sensitive consumers, are familiar with challenging distribution systems, have pragmatic knowledge of complex political and regulatory environments, and they can use the lessons learned from domestic competition in foreign markets (Casanova & Fraser, 2009a). Such features provide multilatinas with the opportunity to compete in international environments with positive outcomes.

There are, however, several challenges to be faced by multilatinas in the upcoming years. Despite the decline in exports caused by the fall in commodity prices, multilatinas invested US\$350 billion outside their home countries in 2013 (Casanova, 2015a). The good news is that such investments may indicate a recovery from the global financial crisis, but multilatinas cannot rely exclusively on commodity to compete abroad. One of

the main challenges to be overcome by these companies is scale; the region does not have a large number of multinationals, especially in relation to the weight of its economy. The other challenge is related to innovation, which is considered the missing link for the region and for its companies. Since multinationals always tended to focus on short-term perspectives without investing in research and development, they lay behind in innovation in products and services (Ibid.).

The rise of multinationals is still in its early phase and limited to a small number of companies. When analyzing the ranking provided by Forbes (2016), which indicates the 2000 largest companies in the world in terms of revenue, profits, assets and market value, Latin America is only represented by seven countries: Brazil, with 19 companies; Argentina with 2; Chile with 8; Peru with 2; Colombia with 5, Venezuela with 4, and Mexico with 15 companies. It is possible to observe that Brazil and Mexico are the most representative countries, which is in accordance with the ranking provided by América Economía (2016). Such difference is even larger when compared with other emerging economies.

Table 12 - Number of large companies in Latin America

<i>Country</i>	<i>Number of companies</i>
<i>Argentina</i>	2
<i>Brazil</i>	19
<i>Chile</i>	8
<i>Colombia</i>	5
<i>Mexico</i>	15
<i>Peru</i>	2
<i>Venezuela</i>	4

Source: Forbes (2016).

Table 13 - Comparison between Latin America and China, India and Russia

<i>Country</i>	<i>Number of companies</i>	<i>Percentage</i>
<i>Latin America</i>	55	2.75%
<i>China</i>	200	10%
<i>India</i>	56	2.8%
<i>Russia</i>	25	1.25%

Source: Forbes (2016).

Despite the relatively low quantity of Latin American companies represented in this ranking, Casanova and Fraser (2009b) believe that, in the short term, Latin American companies tend to achieve relatively high growth rates if commodity prices remain at their record levels. When relying exclusively on commodities, however, such companies become highly vulnerable to demands of international markets. This is why it is crucial to develop other capabilities in the long-term perspective.

The competencies for the internationalization of multilatinas are still being developed. Latin American countries are countries with specific features and particular institutional characteristics, which does not allow generalizations (Fleury & Fleury, 2012). What we can affirm is that multilatinas are prepared to face crises, since they have a particular ability to swim in turbulent waters; the knowledge acquired in the last decade made them stronger to survive current turbulences (Casanova, 2015a).

2.2.3 – Brazilian multinationals

In the previous sections, issues related to emerging market multinationals and Latin American multinationals (multilatinas) were covered. Therefore, it is necessary to bring up characteristics and topics concerning – specifically – Brazilian multinationals. Even though Brazilian companies are usually inserted into the two categories mentioned previously, it is necessary to provide one section to deal with these companies separately considering that the focus of this research relies on them.

The internationalization of Brazilian companies is a relevant matter in the business agenda, especially because it seems there is a large unused potential for the emergence of such multinationals (Cyrino, Oliveira Jr & Barcellos, 2010; Borini et al., 2010). It is possible, however, to observe an increase in more compromised strategies to enter and expand into international markets through the establishment of subsidiaries, associations and strategic alliances, and R&D activities (Cyrino, Oliveira Jr & Barcellos, 2010), even though there is still an inexpressive number of Brazilian multinationals operating abroad (Borini et al., 2010).

According to Borini et al. (2010), there are several barriers for the internationalization of Brazilian companies and only a few companies are able to obtain large revenues from international operations. The other situation mentioned by these authors is that there is a high number of Brazilian exporters in sectors in which natural resources prevail, e.g. agribusiness, food and beverages, and metallurgy. Such statement can be observed in the data provided by América Economía (2016), which presents a ranking with very expressive Latin American companies operating in the food, beverages and steel industries. Even though Brazilian companies are not strongly involved in the high-tech world trade, it is possible to observe some changes in such scenario, since Brazilian multinationals are more involved in the exports of automotive, aviation, motorcycle, and boat vehicles (Borini et al., 2010).

The emergence of Brazilian multinationals is an important phenomenon in the internationalization of emerging market economies. A few time ago, Brazil was considered predominantly a destination for investments accomplished by foreign multinationals (Melo, 2009). Since the 1990s, however, the number of Brazilian multinationals increased significantly, especially after the 2000s (Fleury & Fleury, 2012). Brazilian companies became more relevant internationally due to political and economic stability, strengthening of the local currency, and increase of the competitiveness of local companies (Melo, 2009). Nevertheless, how did such transition occur? How did an agricultural country start expanding into other markets?

In order to address such issues, Fleury and Fleury (2012) decided to separate the internationalization history in Brazil into four parts: (i) from colonial Brazil until World

War II; (ii) the years between 1950 and 1970; (iii) the world crisis between 1970 and 1980; and (iv) the emergence of Brazilian multinationals.

The first period, which encompasses the phase in which Brazil was a Portuguese colony until World War II, indicates the beginning of the development of the local industry, which was formed by small-sized companies operating with basic technologies and involved in traditional segments alongside with subsidiaries of multinational companies. Such subsidiaries were not only involved with manufacturing, but also with the provision of services.

It is, therefore, easy to perceive that foreign multinationals were in charge of many Brazilian activities in such period. They were not only involved with the exports and trade of coffee or other *in natura* products, but also with the imports of manufactured goods that were not produced in the country, including the local assembly and installation of products developed in other countries. That way, local Brazilian companies were more focused on basic industries, such as textiles, cement, footwear, and inputs for factories and construction. Coincidentally, some of these companies would become multinationals one century later.

During such period, the Brazilian government started to play a more active role and stimulated industrialization policies. At the same time, by means of its populist characteristics, the government promoted labor regulations based on patronizing policies, which was strongly related to both Taylorism and Fordism adopted by companies at that time. Such conflict marked labor relations in the country. The government also promoted a national system for innovation by investing in public universities, professional qualification, and technological institutes; in the 1950s, for instance, the financing system for industrial and scientific research was established.

The evolution of the Brazilian industry in this first period indicates that the industrialization began in the country as an answer to the difficulties imposed to imports after World War I, Great Depression, and World War II. Such situation brings up issues related to the dependency theory, which demonstrates the relationship pattern of foreign trade between industrialized and peripheral countries (Latin America). The international division of labor in such context indicates that peripheral countries should specialize in the production of primary goods for exports in order to meet the needs of wealthy countries, which should export manufactured products for such peripheral economies.

That way, peripheral economies do not own autonomy to participate in decision-making processes and are regarded as dependent countries. The shift towards a new growth pattern would only be possible through industrialization, which occurred as peripheral countries managed to adjust to the successive unbalances caused by adverse shocks. It is important to emphasize that such theory influenced the performance of subsequent Brazilian governments, which created several protectionist mechanisms.

The second phase, however, aimed to attract subsidiaries of foreign corporations in order to promote industrial development. During 1965 and 1980, for example, the Brazilian manufacturing sector grew approximately 9.5% per year. It is important to point out that such manufacturing sector was represented not only by Brazilian private and state-owned companies, but also by subsidiaries of foreign multinational corporations. It was believed that such subsidiaries would boost local industries, since they were more involved in high-tech segments.

The main purpose of foreign multinationals was to internationalize activities related to mature products in the end of their life cycles, with standardized productive processes. Consequently, the expectation that subsidiaries of foreign multinationals operating in the country would boost the development of local industries was quite limited when considering the dynamics of international competition. The import substitution industrialization was a trade and economic policy used by the Brazilian government in such period in order to promote domestic companies.

On the one hand, these subsidiaries established intensive industrial assembly plants, which enabled the migration of several workers. On the other hand, they were still lacking of technological leadership. The contradiction is that multinationals were considered important entities involved with public policies related to technological innovation, but they were not a source of such innovations.

In order to fill the technological gap of Brazilian companies, two initiatives were considered: denationalization and technology dependence. Regarding denationalization, analyses indicated the expansion of foreign capital from the 1960s onwards, even with protectionist mechanisms and government support for the growth of local companies. Additionally, Brazilian companies had no resources to lead such process; they were

dominant in traditional sectors, while subsidiaries of foreign multinationals were leaders in modern sectors involving sophisticated technology. State-owned companies were strictly operating in the mining, oil, chemical, and metallurgy industries.

The consequence of such contradiction was the increase of the imports of production assets, which indicated both weakness and technology dependence of the local industry. Within such context, it is possible to affirm there was a considerable increase of inflationary pressures, as well as trade deficits, which undermined the attempts of a local development. This second phase indicates that short-term macroeconomic decisions prevailed over long-term development initiatives.

During the world crisis occurred between the 1970s and the 1980s, Brazil entered a downturn phase. It was believed that the local industry was already self-sufficient. The government started to demobilize competencies related to the elaboration of national development plans and national programs for scientific and technological development, considering they would be no longer necessary. Such approach associated with changes occurring in the international sphere led to a paradoxical situation: Brazilian companies could not become leaders because they were still technology dependent and local subsidiaries did not intend to become leaders because such leadership was not a part of the strategy of the headquarters. The subsidiaries of foreign multinationals operating in the country had to achieve financial performance goals, but had a high operational autonomy.

The constant failures of government programs created a permanent crisis. There was a drastic decrease of FDI in that phase; in 1983, for instance, it achieved the lowest figures in decades. Multinational corporations operating in Brazil decided to relocate activities elsewhere. Such particular period was important for local companies, considering they had to learn how to prosper in adverse conditions, especially related to the wide swing in the overall annual inflation rates.

The fourth part of the analysis indicate the effective emergence of Brazilian multinationals. During the 1990s, the country got definitely involved in the globalization process. Factors related to the international context and to the domestic environment resulted in a tense period for Brazilian companies. Such factors were related to (i) the end of the import substitution industrialization; (ii) the reduction of tariff and non-tariff barriers; and (iii) the increasing competition in the internal market for the presence of

foreign subsidiaries and easiness to import. The competitive environment created a selection process that revealed which Brazilian companies managed to develop management competencies to survive and prosper in such adverse contexts and which did not. In such scenario, the internationalization of Brazilian companies became more relevant. The illustration below indicates the four phases mentioned herein, as well as some of the main characteristics of each one of them.

Illustration 13 - Phases of industrialization in Brazil

Source: Based on Fleury and Fleury (2012).

The information provided in the paragraphs above indicate how the internationalization process began in Brazil, e.g. how subsidiaries of foreign multinationals started to operate in the country and the impacts of such activities on the Brazilian economy. We consider, however, necessary to provide further information about the emergence of Brazilian multinationals.

According to Cyrino and Tanure (2009), it was only during the 1970s that Brazilian industrial companies started to expand into international markets in order to commercialize the surplus of the national production due to government incentives or advantages of favorable exchange rates. Before 1970, Brazil was already involved in the international trade, but only by commercializing agricultural and mineral commodities. Melo (2009) affirms that the internationalization process is particularly relevant for Brazil, considering that the country is no longer a mere global supplier of mineral and agricultural commodities; it consolidates its position in the international market for goods and services. Indeed, Fleury & Fleury (2014) emphasize the fact that emerging countries became not only major recipients of FDI, but also important outward investors.

Regarding the beginning of the internationalization of Brazilian companies, Fleury & Fleury (2009) affirm that these companies started operating in the export market during the 1950s by exporting products for neighboring countries; it was only around the end of the 1990s that the internationalization became more prominent. However, the involvement of Brazil in international issues started even earlier.

When addressing the emergence of the first Brazilian multinationals, Fleury and Fleury (2014) indicate five different stages. The first stage encompasses the birth of the first companies that would become multinationals, whose occurrence dates back to the 1930s. Before 1929, the main concern of the Brazilian government was to uphold coffee prices in the international market. That way, the policies back then were effective until the occurrence of the Great Depression, which affected directly the demand for coffee internationally. After the Brazilian Revolution of 1930, which refers to an armed movement that led to a coup d'état that ended the so-called Old Republic, the efforts to boost national development were directed to import substitution industrialization policies based on a nationalistic ideology.

During this period, three economic activities were highly valued: banking, trading, and textiles. In such scenario, four private companies – that would become global players decades ago – emerged: Brahma and Antarctica (beverages), Gerdau (iron and steel), and Votorantim (cement). Foreign multinationals were also operating in the country during that time in different industries and in a very low scale: British-American Tobacco, General Motors, Ford, Philips, Siemens, Ericsson, Electrolux, Rhone-Poulenc, among others.

The second stage of the emergence of Brazilian multinationals, occurring between 1930 and 1955, was an important period for national companies. After World War II, and following a nationalistic guideline, three important state-owned companies were created: Companhia Siderúrgica Nacional (CSN), Companhia Vale do Rio Doce (CVRD), and Petrobras, which operated respectively in the steel, mining, and oil and gas industries, considered strategic segments for the country. The creation of Petrobras itself was an important milestone for such nationalistic period, considering the government emphasized the monopoly of both oil exploration and distribution in the Brazilian territory. At the same time, around 1952, the government created the National Bank for Economic and Social Development (BNDES, in Portuguese) in order to fund strategic projects related to national infrastructure. In accordance with what Fleury and Fleury (2012) and Casanova and Fraser (2009a) state regarding the strong presence of family-owned companies in Latin American countries, it is possible to notice the raise of two family-owned businesses in Brazil during this phase: Villares and Vidigal, both involved in the heavy equipment industry.

Foreign multinationals operating in Brazil enabled the acceleration of the industrialization process, as indicated by the third phase (from 1955 until 1964). One important government initiative that boosted such industrialization was the adoption of newly developed planning techniques, focusing on the production of durable goods. That way, the industrial growth should be underpinned by private foreign capital, state-owned companies, and local private capital.

It is possible to affirm that, in such period, Brazilian entrepreneurs were more involved in multinational operations as financial partners in large investments; in other words, they were not directly involved with the creation nor the management of multinational companies. Inward FDI went from US\$64 million per year between 1950 and 1955 to an average of US\$150 million per year in the upcoming four years. Such increase in the inward FDI emphasizes the Brazilian dependence on foreign capital, knowhow and technology.

In the next stage of the emergence of multinationals (1964-1980), Brazil went through another coup d'état, which initiated the military regime in 1964. Nationalism was

a strong characteristic of such period, as well as sovereignty and security doctrines, national development plans, and development of programs for science and technology. The government set as priority the creation of infrastructure and the expansion of basic input industries, expanding the performance of national companies. The result was not only the growth of local industries (petrochemicals, capital goods, engineering, services, and defense), but also the enlargement of existing companies in the capital goods industry, such as Villares and Vidigal. These companies ended up diversifying their portfolios and manufacturing other complex products thanks to mechanical and electromechanical technologies. It is important to emphasize that, according to Cyrino and Tanure (2009), Brazilian companies started to focus more on international markets during the 1970s through exports. Exports were, however, not a priority for entrepreneurs; when the international market was no longer an interesting option, companies tended to turn to the domestic market again. According to the authors, the outward FDI accomplished by Brazilian companies was practically inexistent during this period, except for Petrobras, which was already investing in the Middle East during the 1970s in order to ensure oil sources.

Some engineering companies (e.g. Odebrecht, Camargo Corrêa, Andrade Gutierrez, and Promon) stood out during such period and became leaders of large infrastructure projects. It was possible to notice the presence of three entities managing companies: state, foreign, and private local capital. Such model was easily perceived in the petrochemical industry. That way, foreign companies contributed for the local industrialization by bringing technology, the government became the largest shareholder of state-owned companies, and local private partners were responsible for daily operations. The creation of Embraer in the aircraft industry also occurred during this period due to the establishment of the Technological Institute of Aeronautics (ITA), created in the 1950s. The main purpose of the creation of Embraer was not only to fill a gap in the regional civilian aircraft, but also to ensure military protection.

Even though the government wanted to bring technology and industrialization for Brazil through the knowhow and knowledge provided by subsidiaries of foreign multinationals operating in the country, foreign capital expanded strongly instead of domestic capital. The protectionist mechanisms created by the government (e.g. import substitution industrialization) and the support for local companies did not slow down the establishment of foreign companies in Brazil. That way, instead of operating in

manufacturing or high-tech sectors, Brazilian companies ended up standing out in traditional sectors (timber, paper, furniture, textiles, food, beverages, publishing, and printing), while multinationals ruled modern sectors based on sophisticated technology (transportation, pharmaceuticals). State-owned companies kept on operating in infrastructure sectors, such as mining and oil and gas.

Just as Cyrino and Tanure (2009) mentioned, the increase in the imports of production goods emphasized the local industry's technology dependence. It is easy to perceive a contraction between the government's intent and the reality: the more it tried to promote industrialization in the country, the larger the presence of multinationals and inward FDI. That way, the presence of multinationals in the national territory did not ensure technology transfer. At the same time, the country was going through serious issues regarding inflationary pressures and the growth of trade deficits, which led to a growth of foreign debit.

Despite the stages described by Fleury and Fleury (2014), we decided to create herein a new stage, which encompasses the 1980s. Such period was known as the lost decade due to several misfortunes occurred in such time. For start, long-term projects were put aside and short-term macroeconomic decisions were made based on external debt and inflation. It was possible to notice a sharp decrease in the GDP: the average growth was 7% between 1947 and 1980 and dropped to 2% during the 1980s (Fleury & Fleury, 2014). The table below demonstrates data presented by the World Bank (2016) to illustrate the drop in the GDP.

Table 14 - Brazilian GDP growth during the 1980s

<i>Year</i>	<i>GDP Growth (annual %)</i>
1980	9.1
1981	-4.4
1982	0.6
1983	-3.4
1984	5.3
1985	7.9

<i>1986</i>	8.0
<i>1987</i>	3.6
<i>1988</i>	-0.1
<i>1989</i>	3.3
<i>1990</i>	-3.1
<i>Average</i>	2.4

Source: World Bank (2016).

It was specifically during the 1980s that some companies operating in the construction and engineering industry started to look for foreign markets as an alternative to preserve their growth and profitability, considering the decrease in public investments in infrastructure in such decade (Cyrino & Tanure, 2009).

Even though Fleury and Fleury (2014) affirm that the import substitution model was exhausted, Esteves and Feldmann (2016) emphasize that this model was not successful because there was no proper policy to ensure the continuity of the scientific and technological progress in the country; entrepreneurs were not given enough time to prepare to the new market and competitive conditions they would have to deal with. As result, there was a deficient integration between national and international markets and domestic companies were limited to develop new processes and products. In such context, economic liberalization was the solution found by the national government, which had also strong effects on the national economy and companies (Fleury & Fleury, 2014).

Despite pressures to establish some degree of economic liberalization, protectionism and nationalism were still the main feature of the Brazilian economic policy. Slowly, however, such scenario started to change, bringing in the 1990s pro-market reforms, which led to the final stage proposed by Fleury and Fleury (2014) when explaining the internationalization of Brazilian companies.

Between the years 1990 and 2000, privatization policies became stronger, which enabled foreign companies to operate in Brazil. Such policy is also known as economic liberalization. It is important to mention that the country went through unrest moments in the early 1990s: despite the impeachment of the elected president, inflation reached more than 2,000% a year. Such happenings undermined the development of an industrial policy.

Cyrino and Tanure (2009) provide interesting insights regarding the development of Brazilian multinationals during the 1990s. According to them, liberalization policies adopted by the Brazilian government had direct impact on the lack of commitment with foreign markets. Such policies predicted a drastic reduction in import tariffs and barriers for foreign trade, privatization of state-owned companies and deregulation of relevant segments. One of the important effects provided by these policies was the raise of competitiveness in the domestic market.

The authors explain that such competitiveness led to two consequences. On the one hand, it pushed Brazilian companies to restructure and update their operations in order to reach out for excellent productivity and quality levels in order to survive and grow in the domestic market. On the other hand, one would notice how weak national companies were in comparison with foreign multinationals that wanted to expand into the Brazilian market. The result was a consolidation of the Brazilian economy, whose sectors ended up being acquired by larger multinational companies, especially the ones operating in high-tech and global segments (e.g. automotive parts and electronics). The competitive shock also caused the extinction of fragile companies, who could not adapt to the new scenario. Such companies, which had to face fierce competition in the domestic market and were also exposed to the low growth rates occurring since the end of the 1970s, changed their strategies in order to expand into international markets by investing in commercial or productive subsidiaries. That way, internationalization became an important part of entrepreneurship and companies started to put more effort and investment in international initiatives.

In accordance with Cyrino and Tanure (2009), Fleury and Fleury (2014) emphasize that the pro-market reforms in that time provided a reduction of import duties, an improvement of international competitiveness, deregulation of trade and achievement of market selectivity, establishment of a transparent industrial policy, and medium and long-term improvements in competitiveness.

The strongest characteristics of such period was the privatization of state-owned companies, which became a relevant part of the economic policy back then. The aim of

such initiative was to reduce the pressure of the government deficit on public debts. That way, attracting foreign capital would cover part of the unbalanced current account.

Fleury & Fleury (2014) explain that the objective of pro-market reforms in Brazil was to avoid difficulties in macroeconomic spheres, instead of trying to insert the country into the international market; the internationalization of Brazilian companies was, therefore, not a priority. The authors explain that the result of such reform was the eradication of fragile companies that could not cope with international competition and the domination of high-tech sectors by foreign multinationals, which became leaders in most key sectors. Finally, they point out that such reform made some companies stronger, considering they were pushed to operate in such competitive environment; these companies are the ones that became multinationals later on.

Cyrino and Tanure (2009) affirm that the 1990s represent a transition period for the strategy of some large Brazilian companies that faced international initiatives as an alternative for growth and profitability. Fleury and Fleury (2009) affirm that it was during the 1990s that Brazilian companies started operating in Latin America. From 1990s onwards, Brazilian companies sought to enlarge internationalization efforts (Cyrino & Tanure, 2009).

The real problem was, according to Fleury and Fleury (2014), that the internationalization of Brazilian companies was never considered a strategic issue before 2005. That way, despite the liberalization policies occurred in the 1990s, investments of Brazilian companies abroad had no government support, since it was believed that the job creation elsewhere could entail national unemployment. Either way, slowly FDI flows started to change in the country; in 2006, for instance, outward FDI overcame inward FDI, which demonstrates that Brazilian companies were more committed to deepen their efforts to become multinationals (Cyrino & Tanure, 2009).

In the 2000s, Brazilian companies focused on international markets located in developed countries; some companies concentrate their investments in specific regions (only in Latin America or only in the United States, for instance), others tend to operate in more diversified environments (Fleury & Fleury, 2009). The focus on the international market is an important difference between the industrial policy established in 2004 onwards and the ones in previous decades (Griffiths & Wall, 2012). Such policy indicates the government should create a favorable environment for industrial development while

facilitating entrepreneurship. The intention was to foster the development of key activities and technology to allow Brazilian companies to increase their competitiveness in international markets, while supporting and consolidating the image of Brazilian trademarks overseas.

Either way, the information presented herein plus the stages proposed by Fleury and Fleury (2014) enabled us to present the illustration below in order to demonstrate the stages through which Brazilian companies had to go through before internationalizing.

Illustration 14 - Emergence of Brazilian multinationals

Source: Based on Fleury and Fleury (2014), and Cyrino and Tanure (2009).

In a different study, Fleury and Fleury (2012) simplify the internationalization process of Brazilian companies and divide the whole process into three waves. The first wave, occurring in the 1950s and the 1960s, indicate that Brazil was mainly a recipient of FDI and hosted several subsidiaries of foreign corporations. The second wave, in the end of the 1970s and beginning of the 1980s, indicates several isolated and unsuccessful

initiatives to internationalize Brazilian companies. It was only during the third wave, occurred between the 1990s and the 2000s, that Brazilian companies started to effectively operate beyond borders.

Generally, Fleury and Fleury (2014) affirm that Brazilian multinationals are companies with a high degree of resilience, which had to struggle with the Brazilian institutional environment for decades (economic crisis, coup, inflation, etc.). As mentioned in the previous section regarding emerging market and Latin American companies, Brazilian companies ended up developing their own characteristics, which made them ready to compete internationally. Brazilian multinationals are companies with solid experience in manufacturing and process engineering, while providing agile business models. Due to the Brazilian history quoted herein, Brazilian multinationals emerged as a response to environmental conditions and focused on traditional types of businesses, where the competitive advantage comes from new approaches in production, retail, financing or providing services and products with particular costs, risks, and profits (Fleury & Fleury, 2014).

Brazilian companies are more involved in low-tech segments and in process innovation; in other words, these companies pursue new ways of producing standard or slightly commoditized products that are not easily imitable by equipping them with strong competitive advantages (Ibid.). That is in accordance with Prahalad (2010) and Ramamurti (2012), who emphasize that emerging market companies are the ones that can explore the bottom of the pyramid by offering cheaper and innovative products.

Fleury and Fleury (2014) affirm that Brazilian multinationals are companies that invest in process-oriented R&D, keeping strong ties with local and foreign universities and research centers. The authors mention that Petrobras, Gerdau, Votorantim and AmBev are examples of companies that became competitive in the commodity industry – since they learned how to explore efficiently the local natural resources and weather conditions – and in the consumer industry, considering they learned how to operate with large and idiosyncratic local markets.

Fleury and Fleury (2009) explain that the dynamics of internationalization processes of emerging market companies. First, domestic companies need to have a deep understanding on the operation of both local and global markets, especially regarding the development of regional and global value chains, and the standards of their governance

structure. At the same time, they need to perform an evaluation of the competitive strengths of the company based on their essential competencies, while making a comparison between the needs of the value chain and the potential of competing companies.

The fact is that a few time ago, Brazil was mainly a destination for investments accomplished by multinational companies; slowly, the country became more influent in the world market through its products and services (Melo, 2009). Melo (2009) points out that internationalization used to be a reality only for large corporations, which is slowly changing, since medium-sized companies are also starting to internationalize. The author emphasizes that large companies are usually more likely to take the opportunities to invest abroad, since they have better infrastructure and more resources available.

Regarding the presence of small and medium-sized companies abroad, Cyrino and Tanure (2009) affirm that, for such companies, international markets are not considered an option for growth, but a strategy used to compensate for low growth rates registered in the domestic market. Small companies tend to be less entrepreneurial, and, therefore, internationalize less (Rocha et al., 2009). That way, after the economic liberalization occurring in the 1990s, some companies started to invest in more advanced strategies of internationalization, while others remained in the comfort zone offered by a strong domestic positioning, even knowing that would sacrifice their growth (Cyrino & Tanure, 2009).

Despite the shy initiative of Brazilian companies expanding abroad, Casanova (2015d) believes that the Brazilian capability is greater than it is often believed. According to the author, the country's power largely rests on its agriculture, natural resources, energy, and financial institutions, besides manufacturing excellence. Rocha et al. (2009) emphasize that the internationalization of service companies is also becoming more relevant over the past few years. The most dynamic sectors are related to fast food and restaurants, construction and engineering, and software. In accordance with Casanova (2015d), Rocha et al. (2009) emphasize the Brazilian banking and financial instructions, which are in position to compete with several global competitors. The authors believe that the technological advantages of Brazilian banks are due to the several years of

hyperinflation in the domestic market, which pushed banks to adopt high-tech solutions to meet the customers' needs. The table below indicates FDI accomplished by Brazilian companies since 2000 until 2014.

Table 15 - FDI between 2000 and 2014 (million US\$)

Source: Unctad (2016).

After such brief contextualization provided herein regarding the emergence of Brazilian multinationals and the internationalization of Brazilian companies, we believe it is necessary to provide solid information about current Brazilian multinationals. We decided to present herein the data presented by Fundação Dom Cabral (FDC), a foundation which accomplishes yearly since 2006 the ranking of Brazilian multinationals. The purpose of FDC is to monitor the internationalization process of Brazilian companies, as well as understanding the challenges faced by Brazilian multinationals, their competitive advantages and the expansion into international markets. In the 2016 ranking, FDC (2016) took into account Brazilian companies involved in international activities of manufacturing, assembling and provision of services, which have R&D centers, bank agencies, franchises, commercial offices, warehouses and distribution centers abroad. They did not take into account companies in early stages of internationalization only involved with exports or companies that operate abroad through commercial representatives. In order to rank Brazilian companies, FDC (2016) used the internationalization index, which enables a comparison among companies operating in different sectors. The sample was composed by 64 companies; 50 are Brazilian

multinationals operating abroad mainly through subsidiaries, 14 are Brazilian companies operating abroad through franchises. Since the purpose of this study is not to evaluate the performance of Brazilian franchises abroad, we will focus the on the 50 companies operating abroad though subsidiaries.

Illustration 15 - Internationalization index

$$\frac{\frac{\text{Assets abroad}}{\text{Total assets}} + \frac{\text{Revenues abroad}}{\text{Total revenue}} + \frac{\text{Number of employees abroad}}{\text{Total number of employees}}}{3}$$

Source: FDC (2016).

The data presented by FDC (2016) shows that most Brazilian multinationals operate in the segments of Information Technology and Communication (14%), followed by Food and Beverages (10%), Chemical industry (10%), Building materials (10%) and Metallurgy (10%). Such information is in accordance with what has been demonstrate herein, since Brazilian multinationals are more involved with primary sectors (Borini et al., 2010) and with the provision of services (IT).

Table 16 - Segments in which Brazilian multinationals operate

Source: FDC (2016).

Regarding the autonomy of the subsidiary, the research accomplished by FDC (2016) shows that most strategic decisions are still made exclusively by the headquarters (in 40% of the cases). Regarding tactic decisions, most of them are made by subsidiaries after consulting the headquarters (in 40% of the cases, as well). On the other hand, operational decisions are mostly made only by the subsidiary (in 49% of the cases). The research indicates that the degree of autonomy increased for some subsidiaries, which demonstrates that Brazilian multinationals are slowly decentralizing decisions, while involving subsidiaries in the decision-making process.

Regarding the countries in which Brazilian multinationals operate, the United States is still the country that hosts most Brazilian companies, followed by Argentina, Chile and Colombia – countries that present a smaller cultural and geographical difference when considering Brazil. It is important to explain that these are not all the countries in which Brazilian companies operate, but the main destination of the companies approached in this study. All Brazilian multinationals from the sample operate currently in 45 countries.

Table 17 - Countries in which Brazilian multinationals operate

<i>Ranking</i>	<i>Country</i>	<i>Number of Brazilian subsidiaries</i>
1	United States	40
2	Argentina	31
3	Chile	25
4	Colombia	23
5	China	22
6	Mexico	21
7	Peru	20
8	Uruguay	19
9	United Kingdom	16
10	Paraguay	15
11	Germany	12
11	Spain	12
11	France	12
11	Japan	12

Source: FDC (2016).

It is important to mention that, from the 14 countries listed above, seven of them are Latin American countries, and could be included in the group multilatinas. This can be related to what has been proposed by Ghemawat (2008) and Lassere (2012), when mentioning that multinationals tend to, at first, expand into countries that are culturally and geographically closer, before exploring different areas.

Table 18 - Geographic areas in which Brazilian multinationals operate

Source: FDC (2016).

Despite the political and/or economic crisis occurring in Brazil presently, 28.1% of the companies interviewed by FDC expanded into new markets in 2015. One can also observe that 71% of the interviewees affirm that the political and economic context of Brazil did not affect or affected only a little internationalization strategies.

Fleury and Fleury (2009) mention some general characteristics of the internationalization process of Brazilian companies. First, as most multilatinas, it took a long time for Brazilian companies to begin internationalizing; it was only in the end of the 1990s onwards that the national context enabled the emergence of multinationals. Besides, Brazilian companies internationalize according to their own decision and strategies; there is no sort of cooperation among industrial companies or among financial institutions (as in Spain), and there is no strong government support (as in China). Privatized companies were considered in the 1990s the largest Brazilian multinationals. Initially, internationalization strategies were directed towards Latin American countries, which are countries that present a smaller geographic, cultural, and institutional differences. Recently, in order to overcome the liability of foreignness as well as costs and competitive disadvantages of latecomers, Brazilian companies focused on the international expansion and on improvement processes simultaneously by expanding into developed countries.

Unlike developed country companies, which are motivated to expand into other regions to reduce the costs of labor and better access to inputs, Brazilian companies compete with other developing countries as low-cost providers (Cyrino & Tanure, 2009). The appreciation of the national currency and the increase in the competitiveness of Asian companies in manufacturing was a threat for Brazilian industries, which pushes them to look for new internationalization strategies. Boehe and Cruz (2010), for instance, affirm that differentiation by CSR can be an alternative for Brazilian exporters. The internationalization process of Brazilian companies revealed that there is still a new competence to be developed, related to corporate social responsibility (Fleury & Fleury, 2009; Boehe & Cruz, 2010), which can be a way out for companies that want to deal with the liability of foreignness (Fleury & Fleury, 2009).

It is important to point out that many Brazilian companies go international in order to learn how to operate in international markets as a competitive differential; later on, the main purpose is to use acquired competencies to improve the position of the companies in international markets (Cyrino & Tanure, 2009).

Fleury and Fleury (2009) explain that human resources is the area in which Brazilian multinationals lack the most when internationalizing. Cyrino & Tanure (2009) remember that the lack of proficiency in English can also be a barrier for companies that want to operate in different countries. Fleury & Fleury (2009) point out that typical characteristics of Brazilian companies in the 1980s and 1990s can still be observed in many companies, which can sometimes hinder the internationalization process: highly hierarchical structure with a low participation of employees, reactive organizational strategies, low innovation level, emphasis on natural resources and commodities exploitation – a fragile aspect considered as sustainable competitive differential (Cyrino & Tanure, 2009) –, focus on short-term initiatives, adoption of defensive mechanisms, reliance on the government and political networks, and dependence on protected and known markets.

Factors that can hinder the internationalization of Brazilian companies are the absence of policies and support for Brazilian multinationals, the difficulty in transferring competitive advantages of Brazilian multinationals and managerial ethnocentrism

(Cyrino & Tanure, 2009), in which the guidelines provided by the headquarters are prioritized over local characteristics (Fleury & Fleury, 2009).

We tried to provide in this section some relevant information regarding Brazilian multinationals. These companies are not similar to developed market companies; they had to deal with several barriers in the national environment before being ready to go abroad. Therefore, the Brazilian model for international management is still under construction, but its presence is already clear. Internationalization has become a strategic decision that is being more and more adopted by Brazilian companies operating in several different industries (FDC, 2016).

2.3 Social and environmental issues

2.3.1 Corporate social responsibility, sustainable development and social and environmental awareness

Nowadays, issues related to sustainability, corporate social responsibility, ethical behavior and/or sustainability awareness became much more familiar and frequent than they were a few decades ago. Not only companies seem to be more engaged in such initiatives, but the society also seems to be more involved in such matters. That way, it is not only possible to recognize changes occurring in the market since globalization, but also changes related to consumer behavior. According to some scholars (Aligleri, Aligleri & Kruglianskas, 2009; Tachizawa, 2008; Stead & Stead, 2004), the new generation of consumers is responsible for demanding responsible initiatives from companies. It is believed, therefore, that consumers will not only prioritize price and quality, but also the social and environmental behavior of manufacturers.

Consumers are expected to have more consistent attitudes when preferring, for instance, products with environmental labels, which have been increasingly adopted when it comes to the analysis of the life cycle of products; i.e. the conception, definition, production, operation, and obsolescence of a determined product. In Europe, such environmental label is known as Ecolabel, which does not impede European countries from adopting their own national labels. In Germany, for instance, the national label for

environmental and social responsibility is the *Blauer Engel*; in Austria, the *Umweltzeichen*. In Brazil, the Brazilian National Standards Organization (ABNT, in Portuguese) is responsible for such labelling (Tachizawa, 2008).

Considering that consumers demand a stronger involvement of companies in providing solutions for daily problems while questioning the role that such organizations play in the society, these companies are expected to provide products and services consistent with social and environmental values (Aligleri, Aligleri & Kruglianskas, 2009). It is undeniable that consumers became much more conscious over the past few years regarding health, safety and social and environmental impacts entailed in determined products and services. Even though consumers may be willing to pursue responsible products, many times they decide not to.

Despite the imminent interest of consumers in such products, they are not willing to pay the premium price charged for them. Even though many consumers are concerned about social and environmental issues, they usually come across confusing information in the label of products and, many times, they feel fooled by marketing schemes (Stead & Stead, 2004). Besides, many consumers are reluctant to some eco-friendly products, since there is a strong believe these products present inferior quality and poorer functioning (Esty & Winston, 2009).

It is possible to perceive, therefore, that the consumer should not be responsible for turning social and environmental initiatives into successful ventures in the society. Even though there are consumers sensitive to social and environmental appeal, it is possible to affirm that only a few are willing to pay a higher price for differentiated products and services. Auger et al. (2010) affirm that consumers from developed countries place more importance on social product attributes than consumers from emerging markets; maybe the point here is not really about placing importance, but a matter of price sensitiveness.

Stead and Stead (2004) mention that strategy managers are the ones truly responsible for such shift in the paradigms of the business world, considering they should guide organizations through transformational and fundamental processes of change, which can establish new ways of thinking, encompassing economic performance, social system

and ecological balance. Esty and Winston (2009) emphasize that the end consumers do not purchase many socially and environmentally correct products because consumer needs are not in accordance with the price charged for these products.

When bringing up issues related to consumers and socially and environmentally responsible products, it becomes necessary to mention the reputation of companies. This reputation becomes a relevant asset when providing their customers with social and environmental correct products; reputation is defined herein as the synthesis of how stakeholders (e.g. clients, suppliers, government, shareholders, NGOs, media, employees, and competitors) see the company (Aligleri, Aligleri & Kruglianskas, 2009). The term 'stakeholder' will be understood herein as concerned parties constituted by groups or individuals that are interested in the activities or decisions accomplished by an organization (Ibid.). That way, damages in the reputation entails bad publicity and the consequent loss of clients, which can destroy the image and the credibility of a certain company. Esty and Winston (2009) remember that the more a company protects its reputation and makes an effort to create a strong brand credibility, the more successful it tends to be – at the same time, the company acquires a strong competitive differentiation.

It is important to point out that corporate strategies usually imply the maximization of profits by raising the price of sales volume. When it comes to ecologically and socially correct products, the volume should be the strategy itself. To pay a different – and usually higher – price for a determined product is a rare situation, and such prices are usually related to truly innovative products that demand a market redefinition (Ibid.).

The inadequacy of the social performance of a company, plus the lack of social and environmental policies, may lead to serious organizational implications, such as moral and material losses, which cause an increase in costs and a loss of market opportunities. Such misfortunes occur due to the emergence of an ethical awareness and, especially, economic and marketing factors (Aligleri, Aligleri & Kruglianskas, 2009).

Quality management, for instance, could be expanded in order to incorporate social and environmental issues, which could generate new techniques of environmental management and efficient protocols of total quality environmental management (TQEM) (Hart, 2006). While the total quality management (TQM) is an administrative approach that addresses long-term success through the satisfaction of clients, the total quality

environmental management (TQEM) requires a systematic approach, in which one can find the transition between achieving environmental targets and the satisfaction of clients, since consumers expect companies to concern about aspects related to health and environment preservation (Bennett et al., 1993).

According to Tachizawa (2008), even though the current society is more aware and receptive to green marketing aspects, which is related to the increase in the number of consumption of green products³, and even though it is believed that organizations shall survive if they see the environment as a challenge and a competitive opportunity, implementing environmental and social management can be difficult. Such management is defined as driving marketing forces used to protect and improve the quality of the environment based on standards that take into account performance and the conscious use of economic instruments in a regulated context (Ibid.). The author emphasizes that in such management it is necessary to take into account entrepreneurial environmental variables, such as legal, economic, technological, social, demographic and physical demands. Complementarily, environmental management is defined by Barbieri (2007) as guidelines and administrative and operational activities (e.g. planning, direction, control, allocation of resources, among others) used to obtain positive effects over the environment, reducing or eliminating problems caused by human actions or by avoiding such problems from occurring.

Tachizawa (2008) also believes that business administration should have a stronger ecological focus. According to the author, the analysis of the operations of a company should be based on a deep ecological perspective or based on the so-called new paradigm. Such transformation is motivated by a shift of values in the entrepreneurial culture: from domination to partnership; from the ideology of economic growth to the ideology of ecological sustainability. It involves also the replacement of a mechanistic

³ For further information on green marketing, please check Peattie and Crane (2005).

thinking for a systemic thinking, which indicates, consequently, the emergence of a systemic administration.

The concern about the wellbeing of future generations occurs due to the development of an environmental awareness, a theme that still requires a systematic discussion and is defined as the tendency that someone may have regarding issues related to the environment. Such construct, despite complex and multidimensional, is essential for the sustainability of life in society (Gonçalves-Dias et al., 2009).

One can also find in the literature the concept of strategic social and environmental management, which consists of adding social and environmental variables in the entire managerial process (i.e. planning, organization, direction and control) in order to achieve objectives and goals in the most sustainable way possible. When an organization acknowledges social and environmental management as something important for the business and incorporates social and environmental issues in the strategic planning, this company is implementing strategic social and environmental management (Nascimento et al., 2008). Redirecting the environmental and social concern from an operational to a strategic level can improve the competitiveness of companies (Nascimento, 2005). Strategic environmental and social management is a way for organizations to manage their businesses successfully by incorporating social and environmental aspects, aiming a sustainable development.

Gonçalves-Dias and Teodósio (2011) make important remarks on environmental management. According to them, such management is affected by the pressure of regulations, the search for better reputation, pressures from shareholders, investors and banks for companies to reduce environmental risks, consumer pressure, and competition.

One may perceive that the definitions about environmental management is somehow related to other ones that address sustainability and sustainable development. Even though the focus of our research is not to engender a debate about these concepts, it is frequently hard to limit the frontiers between sustainability, sustainable development, social and environmental responsibilities and environmental and social management.

Sustainability is a concept that, according to Veiga (2005), is problematic due to the difficulty to develop only one clear definition about what sustainable development in fact means. The author also perceives a gap in the literature when it comes to the strategic management of sustainable initiatives. According to Gladwin et al. (1995), the reason for

such gap is the dissociation between humanity and environment, which is responsible for the disconnection between organizational environments and natural sources of life. According to Barbieri (2007), the idea of separating human beings from other elements of nature may have caused the increase of environmental problems.

Either way, it is necessary to establish a definition about sustainability, so that organizations are motivated to establish and accomplish sustainability-oriented goals. The Brundtland report, elaborated and published by the World Commission on Environment and Development (WCED) in 1987, defines sustainable development as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs; the concept of ‘needs’ refers to essential needs of human beings, which can be met by the natural environment in the present and in the future.

It is also important to add other definitions about the concept of sustainable development, such as the one provided by Gladwin et al. (1995), in which the concepts of inclusiveness, connectivity, equity, prudence and security are included. The characterization of inclusiveness indicates the incorporation of human and natural systems, while connectivity indicates the understanding of world problems as an interconnected and interdependent system – it indicates, therefore, the impossibility of developing environmental programs without including social issues and vice versa. Equity implies in the fair distribution of rights to resources and properties, between and within generations, while prudence requires precaution, reservation, reversible actions, security margins and preparation for eventual shocks, bearing in mind that ecological and social systems involve high uncertainty and unpredictability, low interaction among the components of the system, unknown thresholds, and complex dynamics.

Considering that sustainability is centered in human activities that predict high and safe life quality for present and future generations, it is important to mention that the security involved in such concept brings up the avoidance of mass losses in the ecosystem and in the health social system. Sustainability also relates to the critical natural capital (i.e. irreplaceable natural resources), to self-organization, to the ability of supporting the biophysical and social system when supporting human enterprises, and to the liberty of the human being (Ibid.)

The definition provided by Gladwin et al. (1995) indicates a concept of sustainability that delimits the considerations above mentioned. Such definition also relates to the one regarding sustainable development provided by the Brundtland Commission. According to the authors,

“[...] sustainable development is a process of achieving *human development* [...] in an *inclusive, connected, equitable, prudent* and *secure* manner. *Inclusiveness* implies human development over time and space. *Connectivity* entails an embrace of ecological, social, and economic interdependence. *Equity* suggests intergenerational, intragenerational, and interspecies fairness. *Prudence* connotes duties of care and prevention: technologically, scientifically, and politically. *Security* demands safety from chronic threats and protection from harmful disruption” (Gladwin et al., 1995).

With respect to the entrepreneurial sphere, Savitz and Weber (2007) affirm that a sustainable company can be characterized by a company that generates profits for shareholders, while protecting the environment and improving the life of the population it interacts with. On the one hand, Maximiano (2009) defines sustainable development as a principle of the responsible use of natural social resources, meeting the needs of present and future generations, based on the concept that the problems of the planet are interdependent and systemic. On the other hand, Stead and Stead (2004) define sustainability in a more direct way: such concept suggests the integration between social and environmental performance in business under the same umbrella.

In such context, it is possible to approach the concept of the sustainability triple bottom line, in which the economic, social and environmental dimensions have to interact in a holistic way in order to approach a sustainable development.

Illustration 16 -Triple Bottom Line

Source: Adapted from ICLEI⁴ (1996).

In such model, the main purpose of the economic development is to support economic activities, while maximizing profits and expanding markets. The social development entails satisfying the basic human needs, increasing equity, ensuring social participation and social responsibilities, and using the proper technology to achieve such goals. At last, the environmental development indicates the respect for nature's ability, preserving and recycling resources, and minimizing waste and emissions. Sustainable development is, according to Bursztyn and Bursztyn (2012), a link between economy, social aspects, and ecology.

The emergence of a sustainable society could indicate the achievement of sustainable development, which is defined as a society that promotes the balanced

⁴ Available at: <http://www.iclei.org/documents/Global/biennial96-97.pdf>.

relationship between man and nature, using natural resources consciously – to meet basic needs –, preserving the environment and ensuring a better future for upcoming generations (Gonçalves-Dias, 2009).

As one can see, several definitions seek to characterize and illustrate sustainability and sustainable development. It is important to clarify, however, that there is not only one correct definition about sustainability; the definitions presented herein complement each other and provide the reader with a broad panorama about what such concept entails and stands for. Based on the information presented in this study about sustainability and sustainable development, as well as environmental management, one can perceive there is no formal dissociation between social and environmental responsibilities. Considering that human beings belong to the environment in which they live, one action caused by humans can result in negative impacts on the environment and vice versa.

Given the importance and influence of social and environmental matters in the society, it is possible to affirm that more and more companies seem to be engaged with the so-called Corporate Social Responsibility (CSR). Aligleri, Aligleri & Kruglianskas (2009) define responsibility as the conjecture in which companies need to accept and compromise with the consequences and impacts of their decisions and actions, in addition to taking into account the demands of everybody affected by their activities.

It is interesting to notice that, just as with sustainability and sustainable development, there is no consensus about the meaning of CSR. Yang and Rivers (2009), for instance, claim that CSR is a brilliant term because it means something, but not always the same thing to everybody; in other words, the authors mean there is still no agreed definition about its meaning and there is no indication that CSR is a better term than corporate social responsiveness, or corporate social performance, or even business ethics. That way, in order to provide some explanation about the concept, the authors mention that CSR indicates a company's strategic approach and initiatives toward stakeholders.

In a more classical vision, a business is socially responsible if it manages to maximize profits while operating according to the law (Steiner & Steiner, 2000). As basic elements of CSR, Steiner and Steiner (2000) mention: (i) actions taken in response to market forces; (ii) social programs; and (iii) voluntary social programs.

Issues related to CSR are becoming more frequent in current discussions and are growing every year (Carroll & Buchholtz, 2009). According to these authors, CSR should

encompass four different elements in order to become effective; as such, companies need to develop an economic, a legal, an ethical, and a philanthropic responsibility – such characterization indicates the presence of CSR.

Table 19 – Corporate Social Responsibility

<i>Responsibility</i>	<i>Social expectation</i>	<i>Duties of the responsible company</i>
<i>Economic</i>	Required in business by society	To be profitable Sales should be maximized; costs should be reduced Investors must provide proper and attractive financial returns
		To obey the law To be in accordance with environmental regulation and consumer rights Regulation to protect employees To honor guarantees
<i>Legal</i>	Required in business by society	To avoid questionable practices To assume that the law is the basis of behavior To do what is fair and just To take ethical leadership
<i>Ethical</i>	Expected in business by society	To be a good corporate citizen To give back To make corporate contributions To provide programs to collaborate with the society (educational, health, culture, and art services) To engage in volunteer programs
<i>Philanthropic</i>	Desired/expected in business by society	

Source: Adapted from Carroll and Buchholtz (2009).

Matten and Moon (2008) explain that CSR is different from business fulfilment of profit-making responsibility and from the social responsibility of governments. The authors define CSR as articulated and communicated policies and practices of corporations that reflect business responsibility for wider societal good. Similarly, Campbell, Eden and Miller (2012) define it as actions that appear to further some social

good, beyond the interest of the company and what is required by law; in other words, CSR involves activities by private companies, where the activity level is above and beyond that mandated by government. It is possible to observe some sense of proactivity in such statement, considering that companies should go beyond operating according to the law.

Griffiths & Wall (2012) acknowledge the existence of several definitions of CSR. However, they affirm that any of these definitions have to include one or more of the following four core characteristics: (i) incorporating voluntary activities (i.e., to go beyond legal and regulatory requirements); (ii) taking negative and positive externalities into account; (iii) taking multiple stakeholders into account (e.g. shareholders, employees, customers, suppliers, distributors, etc.); and (iv) incorporating organizational value. It is important to point out herein that many definitions exposed herein somehow either mention or take into account the role played by stakeholders.

Campbell (2007) affirms that a company is considered socially responsible if they meet the following requirements: (i) they cannot harm their stakeholders (investors, employees, customers, suppliers, or the local community); and (ii) if a company harms its stakeholders, they must rectify whenever the harm is discovered and brought to their attention. The author also provides empirically proven propositions that demonstrate why corporations act in socially sustainable ways.

Table 20 - Propositions for CSR

<i>Proposition</i>	<i>Definition</i>
<i>Proposition 1</i>	Corporations will be less likely to act in socially responsible ways when they experience weak financial performance and when they are operating in an unhealthy economic environment where the possibility for near-term profitability is limited. Companies that are less profitable have fewer resources to spare for socially responsible activities than companies that are more profitable.
<i>Proposition 2</i>	Corporations will be less likely to act in socially responsible ways if there is either too much or too little competition. The relationship between competition and socially responsible corporate behavior will be curvilinear. In the case of monopolies, customers have no other choice and will keep on pursuing products and/or services from irresponsible companies.
<i>Proposition 3</i>	Corporations will be more likely to act in socially responsible ways if there are strong and well-enforced state regulations to ensure such behavior, particularly if the

	process by which these regulations and enforcement capacities were developed was based on negotiation and consensus building among corporations, government, and other relevant stakeholders.
<i>Proposition 4</i>	Corporations will be more likely to act in socially responsible ways if there is a system of well-organized and effective industrial self-regulation to ensure such behavior, particularly if it is based on the perceived threat of state intervention or broader industrial crisis and if the state provides support for this company of industrial governance.
<i>Proposition 5</i>	Corporations will be more likely to act in socially responsible ways if there are private, independent organizations, including NGOs, social movement organizations, institutional investors, and the press, in their environment who monitor their behavior and, when necessary, mobilize to change it.
<i>Proposition 6</i>	Corporations will be more likely to act in socially responsible ways if they operate in an environment where normative calls for such behavior are institutionalized in important business publications, business school curricula, and other educational venues in which corporate managers participate.
<i>Proposition 7</i>	Corporations will be more likely to act in socially responsible ways if they belong to trade or employer associations, but only if these associations are organized in ways that promote socially responsible behavior.
<i>Proposition 8</i>	Corporations will be more likely to act in socially responsible ways if they are engaged in institutionalized dialogue with unions, employees, community groups, investors, and other stakeholders.

Source: Based on Campbell (2007).

This table provides an interesting insights about the occurrence and emergence of CSR in companies. One may highlight the importance of stakeholders and regulation in the process of developing CSR, which are emphasized by Campbell (2007) in these propositions. Issues related to the importance of regulation when it comes to the development of CSR will be approached with more details in Section 2.3.2 and 2.3.3.

CSR is clearly a concept that involves several accomplishments and is becoming more and more a reality for many companies. Nevertheless, how did such responsibility emerge? Why did companies started to incorporate CSR issues into their management? When did it all start?

According to Cochran (2007), in the 1930s, E. Merrick Dodd, a Harvard Professor, implicated that managers should have a wide range of responsibilities; they should be responsible to the public as a whole. Such event should indicate, in accordance with the author, the emergence of CSR. The next phase, occurring in the 1950s and 1960s, indicates the birth of modern activist movements, which reported irresponsible practices of companies. Carroll (1999) believes that the 1950s mark the beginning of the modern era of social responsibility; Carroll and Shabana (2010) emphasize that it was after the 1960s that CSR issues became more prominent. In the 1970s, it became clearer that companies had ethical obligations and that they must respond pragmatically to social pressures (Cochran, 2007).

With regard to the emergence of CSR in Latin America, Casanova and Dumas (2010) disclose that CSR activities started around 1997. At that same time, more than half of Brazilian companies embraced social policies; such shift indicates that managers started to leave traditional business in order to pursue projects with social development priorities. The authors also point out the relevance of the Brazilian environmental law for business, which was instituted in 1995. The authors emphasize, nevertheless, there is a current need for Latin American companies, or foreign companies operating in the area, to improve the level of education of employees.

CSR was not always so well accepted in the managerial and academic spheres. Carroll and Shabana (2010), for instance, mention the repercussion and impact of an academic text published by Milton Friedman in 1962. In such document, social issues were not addressed to business people; they should be resolved by the free market system. Once that the free market cannot solve social problems, government and legislation should do it. The authors mention there were many other arguments against CSR: business should not handle social activities because managers were only oriented towards finance and operations; business can become less competitive globally when pursuing CSR; CSR dilutes the primary purpose of business, etc. According to Griffiths and Wall (2012), the arguments against CSR usually emphasize that managers do not have the moral right to waste resources on social and environmental initiatives; their task is to use scarce resources to increase profits.

There are, however, many other arguments in favor of CSR. One of the main arguments is that if business wants to operate in the future, it has to take actions now in

order to ensure its long-term viability (Carroll & Shabana, 2010; Dobers, 2010). Such argument is similar to the proposition accomplished by the Brundtland Commission when defining sustainable development: it is necessary consider current and future problems to promote sustainability.

In order to analyze why corporations act in socially responsible ways, Campbell (2007) affirms that basic economic factors, including the generation financial condition of the company, the health of the economy, and the level of competition, are likely to affect the degree to which corporations become responsible.

Illustration 17 - Relationship between economic conditions and socially responsible corporate behavior

Source: Based on Campbell (2007).

Considering that the terms ‘philanthropy’ and ‘responsibility’ seem somehow correlated when addressing CSR issues, it is necessary to provide further explanation about their meaning. According to Savitz and Weber (2007), for instance, sustainability has nothing to do with philanthropy; neither does social responsibility – even though social responsibility was understood as philanthropy in the 1920s. Steiner and Steiner (2000) agree with such statement, affirming that until social responsibility became something inherent to the organization, it was seen merely as charity.

One the one hand, CSR is a conscious entrepreneurial decision that aims for a strategic investment in the social sphere; philanthropy is, on the other hand, a social

investment related to charity, paternalism or existentialism (Lima, 2001, quoted by Borini, 2005).

Some scholars are even against the idea of philanthropic practices within an organization because truly sustainable companies do not need to make cash donations for charity institutions as a payback for the local population – the daily operations of companies have to enrich the community instead of depleting its resources (Savitz & Weber, 2007). The terms ‘philanthropy’ and ‘social responsibility’ are commonly mistaken, which indicates that these concepts are still in an early phase of development (Ribeiro, 2008).

Instituto Ethos, a Brazilian non-profitable civil organization, assists companies to manage their business in a socially responsible way. According to such institute, entrepreneurial social responsibility can be characterized as a management style defined by the ethical and transparent relationship between the company and the stakeholders it relates to. It can also be defined by the establishment of entrepreneurial goals that push the sustainable development, while protecting environmental and cultural resources for future generations, preserving diversity and promoting the reduction of social inequalities (Instituto Ethos, 2001). Such definition emphasizes the strong association between social and environmental issues, which should not be handled as separate, but as complementary matters.

According to Bertonecello and Chang Jr (2007), entrepreneurial social responsibility (ESR) should comprehend the following requirements: (i) establishment of a relationship between consumers and suppliers, (ii) provision of quality production, (iii) investment in customer satisfaction, (iv) contribution for the development of the community, (v) investment in technology research, (vi) promotion of environment preservation, (vii) involvement of employees in results and in decision-making processes, (viii) respect to citizenship rights, (ix) promotion of non-discrimination (gender, race, age, ethnicity, religion, sexual orientation), and (x) investment in labor safety and professional development.

Complementarily, Portal Responsabilidade Social (n.d.) affirms that for CSR to become successful, it has to meet the needs of the stakeholders, while being present in the productive chain, and being sustainable and transparent. That way, social

responsibility encompasses social performance and the relationship between the company and stakeholders (Fedato, 2005).

Considering that human wellbeing is directly related to the planet's wellbeing, the social performance of a company encompasses environmental concern, which originates the concept of CSR (Aligleri, Aligleri & Kruglianskas, 2009). That way, when operating in a business model that evaluates consequences and impacts of decisions and actions, social and environmental aspects as well, the company worries about the future, and, consequently, sustainability. It is possible to affirm, therefore, that CSR is inseparable from the concept of sustainability (Ibid.).

The alignment of both social and environmental responsibilities can be understood as effectiveness, which indicates the achievement of economic, social, and environmental goals. Therefore, an effective company is a responsible company (Tachizawa, 2008).

Considering that CSR has to be rooted in business management, it is expected that social and environmental concerns are present from the establishment of contracts with suppliers worried with the environmental and social impacts of their actions until the end of the life cycle of the product and its destination after disposal.

The World Bank (2011), for instance, establishes criteria that indicates reasons why some companies decide to develop CSR. First, the bank mentions that investors put pressure on companies in emerging countries: feeling pressured by business partners, the company tends to adopt CSR in its management. It is possible to affirm that Brazil tried to expand the requirements of investors in order to encourage CSR in the country. Other important requirements brought up by the World Bank (2011) were: (i) contracts with business partners, which start to require a social and environmental behavior; (ii) government intervention, which can drive organization behavior towards CSR through laws and regulations; (iii) social license to operate, which enables the company to go through bureaucratic processes easily ; (iv) innovation and quality control, requirements that derive from better work conditions; and (v) productivity and cost reduction, considering that once productivity is optimized, it can imply in cost reduction for the company.

Illustration 18 - Why companies adopt CSR

Source: Based on the World Bank (2011).

Abramovay (2007) agrees with such model when it comes to suppliers. According to the scholar, companies can impose suppliers to reconsider their productive behavior in order to pursue a more sustainable approach.

Despite pointing out the importance of stakeholders in CSR issues, Cochran (2007) indicates other relevant aspects that can be responsible for the success of CSR approaches. The first aspect is related to the relationship between a company and its employees: companies that have good employee relations present lower turnover rates and a more enthusiastic workforce. The author also attaches importance to costumers, considering they are core elements of most successful companies. Having a strong government relationship is important for companies because they tend to be more likely to anticipate and react to new regulations; companies that have access to public policy makers tend to enjoy competitive advantages. Media is also a relevant aspect: companies that are seen as socially responsible can have an edge over irresponsible ones. Finally, the

author mentions that socially responsible activities can be used to enhance the bottom line by earning better reputation with stakeholders, which can lead to higher profits for shareholders. According to Falck and Heblich (2007), a good reputation has the power to attract, retain, and motivate quality employees, which increases the value of the brand and the company's goodwill.

It is possible to conclude that the new paradigm for social and environmental responsibility indicates a differentiation advantage, which is a result of conducts that aim at accomplishing social and environmental improvements, expanding the degree of sustainability of companies and, consequently, the competitiveness in a dynamic scenario (Aligleri, Aligleri & Kruglianskas, 2009). Considering that such differentiation is directly related to entrepreneurial strategy, it is possible to affirm that the adoption of social and environmental initiatives, e.g. CSR, can provide an increase in the competitiveness of the company, a theme that will be approached in the next section.

2.3.2 Strategy and CSR

The incorporation of social and environmental issues in the managerial agenda indicates a revolution in business administration. Such issues can, therefore, stop being faced as a costly investment and become a strategically relevant opportunity for the competitiveness of companies. As such, CSR starts being considered an efficient management strategy (Falck & Heblich, 2007).

When accomplishing a study on CSR and its link to financial results in a pharmaceutical company, Turcsanyi and Sisaye (2013) conclude that CSR can improve the organization's economic performance. That way, when CSR issues are integrated with economic performance as part of the business strategic planning, profitability can be sustained for a long time. The authors infer that organizations that integrate CSR and sustainability in their strategic planning processes are able to manage risks and take advantages of opportunities of programs that are safer, greener, and economical.

Esty and Winston (2009) claim that social and environmental strategy appeared in the corporate environment over the past 40 years. That way, the authors emphasize that social and environmental issues went beyond regulatory compliance in order to focus on growth opportunity; currently, many companies already acknowledge the potential of the social and environmental trend.

There was, therefore, a shift from a theoretical proposition towards a strategic asset, which turned CSR into a reality in the managerial sphere. Cochran (2007) demonstrates how such shift occurred. First, the author explains how philanthropy turned into strategic philanthropy: philanthropy began in the 1950s with a donation to Princeton University without violating shareholder interest. In such early stage, philanthropy had still no strategic characteristic. In the 2000s, thanks to a publication accomplished by Porter and Kramer (2002), it became clear that social investments should and could provide economic returns. That way, companies should invest in philanthropic areas that benefit the society and the company in order to obtain financial returns. The table below demonstrates the shifts in several areas that started to incorporate CSR issues.

Table 21 - Shifts in the established paradigm

<i>Shifts</i>	<i>Definition</i>
<i>From investing to socially responsible investing</i>	Stakeholders do not purchase or does not sell the shares of companies involved in objectionable practices
<i>From entrepreneurship to social entrepreneurship</i>	The process of applying the principles of business and entrepreneurship to social problems
<i>From venture capital fund to social venture capital fund</i>	Social venture capitalists supply seed money to social ventures while engaging in processes of training future social entrepreneurs
<i>From an MBA to an MBA in CSR</i>	MBA programs focus on the area of social responsibility and social entrepreneurship

Source: Based on Cochran (2007).

It is possible to infer that CSR seems to be moving from a public affairs' concern to a core strategy issue (Kolk & Van Tulder, 2010). The social and environmental sphere is a strategic component that has to be incorporated in businesses; the integrity of each and every contemporary organization relies on it (Abramovay, 2008).

Many companies realized that dealing with social and environmental issues is a strategic matter used to strengthen their market positioning through the reduction of production costs, the development of new products, and the improvement of the corporate image (Almeida Jr & Gomes, 2012). Another important issue, pointed out by Aligleri, Aligleri & Kruglianskas (2009), refers to the reputation of a socially and environmentally responsible company, which may lead to a positive market value: when a company is linked to an ethical image and to a socially responsible brand, it may be seen as the creator of a strategic factor in modern competitiveness. Social responsibility can increase competitiveness by improving the image of a company and by creating a sense of security and belonging for employees (Lauring & Thomsen, 2010). The concept of green competitiveness also indicates that companies need to maintain a good reputation with their stakeholders in order to increase competitiveness at a regional or country level (Bossle et al., 2016).

When explaining why companies should engage in CSR, Griffiths & Wall (2012) bring up several aspects that involve strategy. First, they mention the risk management, which entails avoiding reputational damage. According to them, a way of avoiding reputational damage is to put in place codes of behavior and reporting on ethical and social activities to shareholders (e.g. social and environmental responsibility reports). That way, such risk management is a way of companies to avoid incidents that might damage their reputation.

The second item brought up by Griffiths & Wall (2012) indicates revenue and profit enhancement. According to them, the growth of CSR can bring indicate several positive financial associations: CSR is positively related to revenue and profit outcomes; and CSR is positively related to share price. The last item brought up by the authors refer to the strategic direction provided by CSR, which becomes part of the corporate DNA in order to become strategic.

It is possible to notice that social and environmental issues start to have a stronger relationship to the strategic position of the company, providing an advantageous position with regard to competitors (Barbieri, 2007). The author proposes that the environmental strategic approach is linked to the systematic treatment of environmental issues in order to offer proper values to the business environment, to promote differentiation, and to contribute to the acquisition of sustainable competitive advantages.

In order to add the variable strategy into the concept of sustainability, Stead and Stead (2004) developed the concept of sustainable strategic management, in which the traditional process of strategic management is improved, by adding the variables environment and society in the process of formulation, implementation and evaluation of strategies in organizations. Therefore, the concept of sustainable strategic management is defined by the authors as a strategic management process that is economically competitive, socially responsible, and environmentally correct. In order to implement such type of management, it is necessary that the values of a company are aligned with such initiative, which requires adequate strategies, structure, and processes for implementation. The purpose of this integrative strategy is to create a long-term competitive advantage.

Considering the term 'competitive advantage' has been used herein for several times, it is necessary to discuss it further. Such concept was proposed by Porter (1986) as a way to explain competition. One important strategy proposed by such model deals with the power of differentiation. Product differentiation is considered highly relevant because it isolates competitiveness; i.e. consumers have particular preferences and feelings of loyalty for certain products developed by determined companies (Porter, 1986). It is possible to infer, therefore, that companies that invest in product differentiation can increase their profitability, aiming at consumers that are willing to prefer sustainable, e.g. socially and environmentally, responsible products. Such strategy consists of projecting a strong identity to a certain service or product, which can be related to a brand image, technology, or social and environmental aspects.

For an environmental and social differentiation strategy to prosper, it is necessary to take into account the placement of products and services in carefully segmented markets. In order to accomplish such goal, the company has to innovate; continuous innovation is necessary to maintain a competitive advantage because as soon as

competitors start imitating socially and environmentally correct products, the competitive differentiation gets lost (Stead & Stead, 2004). We will approach further issues related to innovation and sustainability in Section 2.3.4.

Tachizawa (2008) affirms that the demand for social and environmentally responsible products in Brazil affects product the export of goods and economic exchanges. Boehe and Cruz (2010) also explore the importance of CSR product differentiation in exports; the authors emphasize the importance of adding CSR characteristics into products and services in order to obtain better export performance.

As Brazil became competitive within low-cost countries, such as China and India, the main strategy used in exports was cost-reduction. In the short-term perspective, developed countries purchased several Brazilian products, which indicated an increased volume in sales. The appreciation of the national currency, however, limited the country's strategies to differentiate. Therefore, CSR turned out to be the most relevant asset in the context of innovation and product quality improvement (Boehe & Cruz, 2010).

Thus, one may assume that environmental and social management, associated with CSR, promotes competitiveness within organizations, whose strategic discussions, integrated into social and environmental issues, may lead to cost reduction and profit increase. It is necessary to emphasize there must be no conflict between profitability and social and environmental issues.

In the previous Section, we exposed the opinion of some scholars (Savitz & Weber, 2007; Steiner & Steiner, 2000; and Lima, 2001, quoted by Borini, 2005) that highlighted philanthropy in business as being purely charity. Even though Carroll and Buchholtz (2009) affirm that philanthropy is one characteristic of CSR, it does not prevent it from having a strategic characteristic as well. Porter and Kramer (2002) affirm that philanthropic practices may lead to a competitive advantage by linking social and economic goals and ensuring long-term investments.

The authors, in fact, claim that philanthropy is becoming decadent, since managers cannot obtain positive results in the short-term perspective and are often put under pressure by stakeholders. It is hard to define strategic philanthropy because philanthropy

is usually associated with brand promotion, which improves companies' visibility and ethics. Even though strategic philanthropy should be linked to business and charity, it is usually not related to strategy; only to publicity. The authors suggest that corporations should use their efforts regarding charity to improve their competitive context, i.e. the quality of the business environment in which they operate. The use of philanthropy to improve such contexts results in the alignment of economic and social goals, which improve business in the long-term.

The terms “social” and “economic” should not represent a dichotomy; they can move forward together, taking into account that corporations do not exist without society. The more social improvement relates to business, the more it leads to economic benefits.

Nascimento (2008) acknowledges the important role represented by philanthropy in business, but emphasizes that social and environmental responsibility must not be limited to social philanthropic actions; furthermore, it must involve environmental and economic issues.

It is possible to conclude, therefore, that CSR can become an opportunity for innovation and competitive advantage (Porter & Kramer, 2006). Corporations used to obtain this kind of responsibility due to moral obligations, license to operate and brand reputation, neglecting strategic aspects. It is possible to infer, however, that successful corporations need a healthy society: thus, handling security and good working conditions attracts consumers and, at the same time, reduces internal costs in terms accidents at work, for instance. A company needs to, therefore, integrate social perspective into its internal structures, in order to understand the competition process and to guide business strategies in a better way.

Linking social and environmental aspects in management may lead to strategic and marketing benefits, which in turn promote changes in the organizational cultural by projecting a new company image within society (Nascimento et al., 2008). Therefore, we claim it is possible to obtain economic profits once engaged in social and environmental issues.

The association between environmental performance and strategy through product reconditioning can create distinct advantages for companies. This was verified by Gonçalves-Dias and Teodósio (2006) when demonstrating the outcomes of reverse logistics in the production of PET bottles. Some companies can see beyond residue

reduction and cost effectiveness, and thus, they become able to find a market for products that would have been simply discarded (Esty & Winston, 2009).

Husted and Allen (2006) affirm that CSR is not only a strategic opportunity, but also a set of obligations; CSR is often subject to strong pressures of institutional isomorphism. That way, one may affirm that environmental regulation can bring competitive advantages to companies (Esty & Winston, 2009). Companies that go beyond the fulfilment of legislation should demand stricter regulations. Tougher laws result in costs to the less prepared competitors and could keep them out of the market for years. Therefore, companies should demand more severe regulations; although it is a risky procedure, it can become an important resource to create meaningful advantages.

2.3.3 CSR in multinationals

Multinationals are considered the agents of globalization, and, as such, these companies become the front-line targets of critics related to global warming, pollution, corruption, disrespect of human rights, child labor, and poor citizenship (Lassere, 2012). This is why such companies have to struggle to preserve their image; engaging in CSR initiatives can improve the perceptions resulting from bad practices, while avoiding penalties and sanctions for not complying with local regulations.

Multinationals are considered influent organizations especially in developed countries; considering developed market multinationals, one may expect them to bring better work conditions and a more intensive awareness about local social and environmental issues. It is possible to find, however, several multinationals involved in unfair labor practices, which can result in damaged reputation and retaliation by customers. This is why it is necessary to implement working standards worldwide; such implementation can improve the working conditions of employees in the countries in which multinationals operate (Fifka & Frangen-Zeitingner, 2015).

Beckham, Colwell & Cunningham (2009), for instance, believe that national companies, due to their intimate knowledge of the market place, can launch more tailored,

credible and authentic programs than multinational corporations. It should not entail, however, that multinationals stop pursuing CSR in the countries in which they operate.

Regarding the relationship between multinational corporations and their subsidiaries, some relevant conclusions can be drawn. Borini et al. (2011) present CSR strategies as value creation in multinational corporations, which indicates a source of international advantage and an internal legitimacy within foreign subsidiaries in peripheral countries. According to the authors, subsidiaries that develop CSR strategies are the ones that transfer their competencies to other units of the corporation, becoming strongly integrated with their headquarters. Local practices of CSR in a subsidiary can be transferred to other subsidiaries or even to their headquarters, since there is an integrated structure, followed by a strategic alignment among the units of the corporation. Therefore, strategies of CSR can add value to a multinational company, even though its financial impact may not be completely measured.

Still regarding the relationship between headquarters and subsidiaries in Brazil when it comes to CSR issues, a study accomplished by Pinto, Oliveira Jr and Borini (2013) indicate there is a positive relationship between the integration headquarters-subsidiary and CSR; the more integrated to the headquarters, the more the subsidiary tends to develop CSR. The strategic relevance of the subsidiary is also relevant when it comes to CSR: the more a subsidiary is considered relevant by the subsidiary, the more it tends to adopt CSR. The most interesting result refers to the relationship between the development of the country of origin of the headquarters and CSR. Steiner and Steiner (2000), for instance, claim that developed countries are the ones that should be involved with social and environmental issues, considering that in Latin America there is no common sense of social and environmental awareness. The results presented by Pinto, Oliveira Jr and Borini (2013) show the opposite: the level of development of a country does not influence its subsidiaries to have CSR. That way, the multinationals originated from the most developed countries are not the ones with more responsible practices in Brazil.

Pinkse, Kuss and Hoffmann (2010) affirm that a shared level of absorptive ability across subsidiaries facilitates the use of environment-related knowledge. However, considering that environment-related knowledge differs across countries, it is also necessary to build unit specific absorptive ability on the subsidiary level. That way,

multinationals are more likely to adapt to global environmental practices, while lowering the cost of implementing global environmental standard.

With regard to the geographical barrier among countries and companies, Campbell, Eden and Miller (2012) believe that distance affects the willingness and ability of multinationals to engage in CSR abroad. They believe that foreign affiliates from more distant home countries are less likely to engage in host-country CSR. Despite increased strategic motivation for CSR, the countervailing effects of distance on the willingness and ability to engage in host-country CSR result in lower CSR investment. It is important to point out herein that these results are strictly related to a single case study conducted in the USA in the banking industry. According to the authors, there were mainly three reasons to explain the lack of engagement of these companies in CSR: (i) managers are reluctant to engage in overseas CSR if they are less able to identify with host-country constituents, (ii) multinationals may see the return on overseas CSR activities as lower or less certain, (iii) regulatory and economic differences between home and host country can make CSR investment costly or difficult.

According to Yang and Rivers (2009), when subsidiaries of a multinational corporation operate in countries that present very different institutional environments than the ones in the home country, they tend to adapt to local CSR practices to deal with legitimacy challenges. Such practices avoid costs, because when multinationals fail in understanding local regulations, there tend to be unforeseen costs. Similarly, the code of ethics is also negotiable and can be translated into different versions considering the different institutional environment of countries (Helin & Babri, 2015). Amaeshi and Amao (2009) emphasize the importance of the adoption of codes, considering they demonstrate strategic choices and responses to the local institutional environment.

Hart (2005) affirms that the strategy of many multinationals is based on exploring emerging countries, e.g. China, India, and Brazil – the potentially wealthy consumers in these countries. According to the author, managers think that the top of the social pyramid should be the most explored one in emerging economies; that way, the situation would be close to the one found in developed countries. The base of the pyramid offers, however, an ideal scenario for the development of new sustainable technologies – once this strategy

is extended to the base, it becomes possible to reach a balanced and effective macroeconomic development in poorer countries, avoiding environmental degradation and providing the economy sustainable growth. Prahalad (2010) also agrees to such statement, as he claims that the bottom of the pyramid is the better source for sustainable innovation.

Socially responsible corporate behavior varies across countries, since political and economic institutions are different (Campbell, 2007). The greatest problem about CSR in multinationals is that different countries have different laws, standards and regulations – that way, there are more ways to get away with less than ideal behavior in order to pursue greater profits (Falck & Heblich, 2007). Multinationals can contribute to regulation gap if the company faces its individual commitment as a long-term investment or if all companies agree on closing the regulation gap, turning it into a collective commitment (Ibid.). In order to overcome geographical barriers, some companies are trying to link their CSR strategies to core activities in order to manage international operations and earn a license to operate in different cultural and environmental settings (Kolk & Van Tulder, 2010).

Even though CSR is defined as being economically profitable, law abiding, ethical, and socially supportive, it is hard to keep such standards when operating in countries that present different contexts with diverging views of the role of business in society (Ibid.).

Since the 1960s, the role played by multinationals was questioned regarding environmental and social matters, which pushed companies to enforce policies and social reporting (Lassere, 2012). Given the negative commercial consequences related to the misconduct of multinationals, companies start getting more involved in environmental protection, the fight against corruption or the protection of human rights.

Therefore, the OECD (2011), acronym for Organization for Economic Co-operation and Development, published some guidelines for multinational corporations in the Brazilian edition due to misconduct of several Brazilian companies in social, environmental and ethical issues. The argument brought up by them is that multinational companies became such large organizations that it is necessary to develop tools in order to counter the negative social and environmental consequences they cause. The guidelines are divided into ten categories: (i) concepts and principles; (ii) general policies; (iii)

reporting; (iv) employment and labor relations; (v) environment; (vi) corruption; (vii) consumer interests; (viii) science and technology ; (ix) competition; and (x) fiscal obligations.

Even though all these guidelines are important, we want to focus on some guidelines and recommendations proposed by OECD (2011). The first point is related to the alleviation of the environmental and social damages caused by multinationals. OECD recognizes that the governments that conform to the guidelines, e.g. the Brazilian government, expect multinationals to help economic progress, but it is also necessary that these companies try to alleviate or reduce the impacts of their activities. In order to pursue such goal, the government ends up having partnerships with several companies, unions, and NGOs. Such process impedes foreign multinationals to operate in a country while damaging natural resources and harming the local population, as not coping with labor relations, as happened in Nigeria (Eweje, 2009), or causing pollution, as in China (Chen, Ong & Hsu, 2016).

One of the other issues mentioned by OECD refers to social and environmental reporting. Lassere (2012) and Griffiths and Wall (2012) emphasize the need to provide reporting, considering this is a way of informing the society and the stakeholders about the advances in the area of sustainability. OECD (2011) also indicates that such reports must have high quality standards and must go through yearly auditing in order to prove that the information is correct.

The guidelines also implicate that companies have to provide their employees with the proper educational level on environmental, health and safety issues. Besides, OECD (2011) indicates that the company also has to train employees regarding handling hazardous materials, the prevention of environmental accidents, and even about broader aspects of environmental management, such as procedures of evaluation of environmental impact, public relations, and environmental technologies.

OECD (2011) specifically claims that multinationals have to confront corruption. In other words, multinationals must not, direct or indirectly, offer, promise, give or request bribe or other advantages in order to develop or to preserve business or other inappropriate advantages. These companies have to resist the solicitation of bribe and

extortion. Several scholars (Lassere, 2012; Ako, 2013; Rathert, 2016) approach the issue that relates multinationals and corruption. Considering that multinationals are companies that influence the behavior of the society in which they operate, these companies also should struggle against corruption practices.

Corruption is considered one of the main global business issues and is defined as the abuse of entrusted power for private gain (Lassere, 2012). According to Lassere (2012), there are several causes for corruption, but they usually belong to five main categories: (i) administrative resource allocation (substitution of transparent market mechanisms for administrative authorization and distribution); (ii) lack of institutional checks and balances and information; (iii) insufficient funding of public services; (iv) social and cultural factors (nepotism); and (v) natural resources (abundant natural resources are an incentive for bribery, especially in developing countries).

Corruption is, according to Ako (2013), a CSR issue. Therefore, the author claims that the social responsibility of a multinational corporation is to avoid international corruption, e.g. transnational bribery. There are voluntary guidelines and legal rules that try to avoid corruption, but, according to the author, laws have to be harder, especially in developing countries, which seem to be more prone to corruption. Another issue regarding corruption is that some host countries lead multinationals to distance themselves from questionable (i.e. corrupt) institutional environments (Rathert, 2016).

Corruption has direct and indirect effects (Lassere, 2012). The direct effects include discouragement of domestic and foreign indirect investment because of the additional cost burden on projects, reallocation of public capital expenditures in favor of new equipment as opposed to maintenance and operational expenditures, and reduction of productivity of public investments and reduction of taxes collection. The indirect effects implicate in the reduction in work productivity because of demotivation, dislocation of social fabric, loss of integrity inside the bribe-giving company, and association with criminal and terrorist activities. As anti-corruption measures, the author mentions reports and audits.

Another relevant issue with regard to multinationals is the compliance with regulation. Regulation is defined as the rules, laws and codified norms that are part of the legal framework of business; such involve ethical, social and environmental responsibilities (Eberlein & Matten, 2009). The authors affirm that regulation is normally

issued by governmental bodies or supranational institutions with governmental authority, e.g. the European Union.

Despite the strategic characteristics related to CSR proposed in Section X., Husted and Allen (2006) claim that multinationals tend to manage CSR according to institutional pressures rather than a strategic logic. That way, it is possible to infer that regulation tends to be more relevant than the strategic aspect usually addressed to CSR practices.

Carroll & Shabana (2010) believe that CSR will ward off government regulation; that way, business policies with self-disciplined standards will fulfil society's expectation. According to them, proacting is better than reacting – it is more practical and less costly. Campbell (2007) considers that regulation sometimes creates new forms for opportunistic behavior, e.g. subversion of regulatory authorities. Despite such disadvantage, regulation seems to be an important mechanism to ensure CSR.

Young and Makhija (2014) present relevant findings on the importance of regulation in business. According to them, stronger regulatory institutions relating to rule of law and labor regulations establish higher standards for companies' behavior toward employees, which leads them to seek legitimacy through higher CSR responsiveness. The same way, stronger normative institutions related to benevolence and egalitarianism can increase a company's willingness to enhance CSR activities.

The use of regulation is relevant because it ensures the quality of the environment; by doing such, it is possible to hinder the predatory use of nature (Bursztyn & Bursztyn, 2012).

Regulation is the central matter of a research accomplished by Gonçalves-Dias and Teodósio (2011). These authors stand up for the importance of regulation and social pressures as driving forces of environmental innovation, which are strongly related to strategic changes in companies. According to them, innovation is related to regulation because it tends to anticipate rules and standards and/or reduce the risk of the company to receive sanctions.

Companies are not naturally self-conscious about the importance of social and environmental aspects. Porter and Linde (1995) affirm that regulations are necessary

because they (i) create pressures to motivate companies to innovate, (ii) alert companies regarding the inefficiency in the use of resources and potential areas for technological improvements, (iii) create the demand necessary for environmental improvements, and (iv) to avoid companies from being environmentally irresponsible (and losing their competitive advantages). The costs of addressing environmental regulations can be minimized, if not eliminated, through innovations that deliver other competitive benefits. Innovation in response to environmental regulation can be, therefore, profitable.

Abramovay (2007) believes that companies should not just be in accordance with the fulfillment of legislation or with the avoidance of environmental disasters. The author believes that environmental issues should no longer be considered a limit or externalities. Considering such issues externalities, companies expect the public sectors to regulate sustainable practices through the collection of taxes and charges, restrictions, or incentives. According to him, companies should anticipate managerial decisions in order to meet the expectations of the society regarding social and environmental matters.

The private sector and entrepreneurial associations are the two entities that go beyond the fulfillment of the legislation with regard to social and environmental impacts of their actions (Abramovay, 2008). It is possible to claim that these two entities tend to play a more proactive role in the compliance with regulation.

Regulatory instruments, also known as command and control tools, aim to influence the behavior of society (from the productive until the public sector) in order to promote the adoption of practices more compatible with the quality of the environment (Bursztyn & Bursztyn, 2012). These coercive tools, which concern productive processes, limit or forbid the discharge of pollutants, regulate land use, and control activities through authorizations, rules, and sanctions. Bursztyn and Bursztyn (2012) affirm that the purpose of economic tools is to create some sort of retroaction of the consequences of an activity with regard to the responsible entity.

With regard to proactivity, Nidumolu, Prahalad, and Rangaswami (2009) affirm that, even though it is tempting to comply with the lowest environmental standards, it is better to comply with strict rules before enforcement. That way, a company can acquire first-mover advantages in terms of fostering innovation; companies that meet emerging norms gain more time to test new materials, technologies, and processes.

Even though we have explored here the importance of multinationals to comply with local regulations, it is important that the host country also does its share. In a study that explored the operation of multinationals in China, Tan (2009) emphasizes that the institutional environment in the emerging market also has to be improved, i.e. legal framework and ethical culture. In the Chinese case, for instance, the regulatory and pre-existing ethical conditions are inadequate and contribute for the irresponsible behavior of foreign multinationals, considering that the Chinese institutional environment offers loopholes for multinationals to exploit.

Such problem can also be perceived in a study accomplished by Eweje (2009), in which the author affirms that in Nigeria and Zambia there is no adequate measure to enforce labor laws over multinationals. The author affirms that, in the area of labor relations, there is a sharp criticism from employees and even host governments. The author affirms that it is the obligation of business to protect the well-being and personal growth of all employees – this is why multinationals have to be pushed to comply with regulation and local laws.

In emerging economies, Eberlein and Matten (2009) affirm that regulation cannot be implemented by governments single handedly; it is necessary to involve other important players. It is possible to conclude, therefore, that governments and companies should work together in order to establish regulation.

2.3.4 Sustainability-oriented innovation

Considering that issues related to CSR have already been approached in the previous Sections, we will approach herein subjects that relate sustainability and innovation. It is important to mention the existence of several terms that are somehow related to both sustainability and innovation, e.g. sustainable innovation, eco-innovation, and sustainability-oriented innovation. We will also explain herein why we chose the term ‘sustainability-oriented innovation’ over the other ones.

Environmental issues became, in some companies, an incentive for technological innovation (Almeida Jr. & Gomes, 2012), which explains the existence of innovations that are related to sustainability. It is possible to infer that these type of innovation can be related to: (i) larger environmental and social problems, which not only make companies more aware and concerned about their roles in the society, including the alleviation of such problems, but also makes them realize and perceive that environmental and social issues can also indicate a market opportunity; (ii) the stronger competitiveness found nowadays makes companies want to see where they can differentiate from competitors in order to remain in the market, and, that way, social and environmental issues can indicate a new market; and (iii) the possibility of exploring a new niche, which involves sustainability aspects and innovation, also encourage companies to invest in such matters. Boons et al. (2013) affirm that future competitiveness is no longer defined as the struggle to remain competitive, but the creation of new markets, underpinned by innovation.

The emergence of sustainability in the managerial sphere is relevant not only for putting a normative demand on innovation to become more environmentally and socially responsible, but also to provide new sources of innovation and competitive advantages (Hansen, Grosse-Dunker & Reichwald, 2009). Considering that the definitions of sustainable development are dynamic and change according to different scenarios, it is essential that sustainability and innovation are developed in conjunction (Bossle et al., 2016).

Roscoe, Cousins and Lamming (2016), for instance, work with the concept of eco-innovation, identifying three types of it. The most common type, known as simply eco-innovation, is defined as the innovation that improves environmental performance; incremental eco-innovation includes the creation of an agreed standard for sustainable activity; and, at last, incremental eco-innovation refers to the development of renewable energy technologies created to replace large parts of extractive industries.

Bossle et al. (2016) affirm that there are relevant factors that can boost eco-innovation, such as environmental capability, environmental managerial concern, human resources and environmental strategy. The authors claim that resource scarcity and environmental degradation are the motivators for the froth of reputational and regulatory pressures, which make companies face the challenges and opportunities of such scenario, which usually leads to the development of eco-innovation.

According to Boons et al. (2013), however, sustainable innovation goes beyond eco-innovation because it includes social objectives and is more related to the holistic and long-term process of sustainable development for short- and long-term objectives of sustainability. The definition of eco-innovation provided by Bossle et al. (2016) is somehow closer to such definition of sustainable innovation; according to the authors, eco-innovation is a change of philosophy that addresses innovation and economic, environmental and social pillars. According to Franceschini, Faria and Jurowetzki (2016), sustainable innovation is a system-oriented term, which entails a stronger sociological component – this is why such term is different from others.

Sustainable innovation involves a complex adaptive system for companies engaging in such type of innovation (Iñigo & Albareda, 2016), while requiring radical and systematic innovations (Boons et al., 2013). Unlike the definition of eco-innovation provided by Roscoe, Cousins and Lamming (2016), Boons et al. (2013) claim that sustainable innovation is the innovation that improves sustainability performance, which involves economic, environmental, and social criteria. These criteria should be integrated into company systems from idea generation, through research and development, until the commercialization of products, services, technologies, and new business and organizational models.

Prahalad (2010) also makes relevant remarks about sustainable innovation. According to the author, bottom of the pyramid markets (a.k.a. BOP markets) are an important source for experimentation in sustainable development, considering that resources (water, energy, transportation) are scarce and expensive for most part of this population. Therefore, innovation have to be created to fill this gap for such kind of public, which may lead to sustainable development.

One can also find in the literature the term sustainability-oriented innovation, which can also find several definitions. One the one hand, Hansen, Grosse-Dunker and Reichwald (2009) define it as the innovation that is individually perceived as adding positive net value to the overall company's capital stock; on the other hand, Jay and Gerard (2015) define SOI as the innovation that affects positive impact over the product lifecycle, taking into account technical, economic, social, institutional, regulatory, and

environmental factors – that way, in order to be SOI, a innovation has to at least improve the environmental and/or social performance compared with the current situation in the short- and long-term. The latter definition seems to more in accordance with what we believe SOI should mean. Innovation is defined, according to Jay and Gerard (2015) as the process, which encompasses the ideation, development and diffusion of a solution to any existing problem.

According to Boons et al. (2013) sustainability criteria differ as a result of spatial, temporal and cultural embeddedness; therefore, sustainable innovation will have different meaning and characteristics in different contexts. The other problem concerning the definition of sustainable development is that such term might lead to a confusion between the purposes of innovation (i.e. innovation for sustainability) and its nature or quality (i.e., innovation process which is sustainable within the company) (Jay & Gerard, 2015). Such statements explain our choice for the term sustainability-oriented innovation over sustainable innovation.

In the 1990s, Porter and Linde (1995) were already exploring SOI issues – even though they did not use such nomenclature back then. The authors emphasize the need to innovate taking into account social and, especially, environmental issues. One example quoted by them refers to pollution: if managers accept that pollution is a resource inefficiency (i.e., flaws in the product design or in the production process), they should invest in innovations that avoid such waste; innovation can improve quality while lowering costs. That way, an innovation for this area could provide the use of inputs more efficiently, eliminating the need for hazardous materials. Nidumolu, Prahalad and Rangaswami (2009) emphasizing that environmental-oriented innovation lowers costs because companies tend to reduce the inputs they use, while generating additional revenues from better products or new businesses. Chen, Ong and Hsu (2016) emphasize that the pollution generated by multinational construction firms in China has significant impact on the short- and long-term financial performance due to the loss of resources.

Another important matter addressed by Porter and Linde (1995) and Jay and Gerard (2015) is the need to turn SOIs into commercially relevant issues; the innovation that are commercially relevant are more likely to become financially and economic sustainable. Such affirmation refers to the triple bottom line, considering that, in order to

pursue sustainable development, economic, social and environmental goals should stick together.

The issue regarding the sustainable and responsible use of inputs was also brought up by Hansen, Grosse-Dunker and Reichwald (2009). According to the authors, in order to pursue SOI, it is necessary to pursue a life-cycle orientation, including the consideration of the entire supply chain. When moving upstream, the influence of the producer decreases, which does not prevent the company from considering the origin of the inputs, the supplier's occupation health, safety, and working conditions. The authors mean that a SOI should consider not only the better management of natural resources in order to avoid waste and unproductivity, but also the source of inputs and the workers involved in such task. Nidumolu, Prahalad and Rangaswami (2009) affirm that most large corporations induce suppliers to become more conscious about sustainability issues by offering them incentives.

Nidumolu, Prahalad, and Rangaswami (2009) emphasize the need to relate sustainability and innovation; considering sustainability a goal, early movers can develop competencies that are hard to imitate. According to them, the competitive advantage related to sustainability will always be an integral part of development. The authors also indicate five stages of change to foster companies and employees to pursue and/or engage in SOI: (i) viewing compliance as opportunity; (ii) making value chains sustainable; (iii) designing sustainable products and services; (iv) developing new business models; and (v) creating next practice platforms.

It is important to point out that most authors emphasize the importance played by regulation in sustainability-oriented innovation matters (Nidumolu, Prahalad & Rangaswami, 2009; Klewitz & Hansen (2011); Porter & Linde, 1995; Hansen, Grosse-Dunker & Reichwald, 2009; Bossle et al., 2016). As drivers and motivations for the adoption of eco-innovation, for instance, Bossle et al. (2016) affirm that regulation alongside with normative pressures and the need for efficiency (e.g. cost saving); motivation is, however, still oriented towards the compliance with standards and regulation rather than an awareness for sustainable goals. According to Porter and Linde (1995), innovation in response to environmental regulation can fall into two categories:

the first indicate the emergence of new technologies that minimize the costs of dealing with pollution; the second addresses the root causes of pollution by improving resource productivity. Environmental process demands that companies innovate to raise resource productivity; resisting innovation that reduces pollution will lead not only to environmental damage but also to the loss of competitiveness in the global economy.

When describing sustainable innovation, sustainability and CSR, many scholars emphasize the importance of stakeholders (Aligleri, Aligleri & Kruglianskas, 2009; Campbell, 2007; Fedato, 2005; Casanova & Dumas, 2010, among others). In SOI issues, such subject is also brought up by Klewitz and Hansen (2011); according to them, there is a strong pressure from stakeholders that demand companies to address sustainability-related concerns. Such stakeholders play a stimulating role, considering they can demand a more responsible behavior from companies, including when it comes to innovation.

2.4 – Brief account

In this theoretical framework, we brought up relevant issues related to Brazilian multinationals, CSR and SOI. First, we began by providing some basic insights on the emergence of globalization and internationalization of companies. In such context, it was necessary to bring some definitions about multinationals, while pointing out the existence of other terms to designate these companies, e.g. global and transnational companies.

When dealing with the presence of multinationals, it is necessary to mention the two entities that represent it: headquarters and subsidiaries. Multinational companies almost instantly imply the presence of one active entity in the home country and other(s) in operation elsewhere. Therefore, even though the focus of the study is to address issues related to Brazilian multinationals, it was necessary to bring up relevant information on headquarters and subsidiaries. It is important to mention that, in our research, we will use the headquarters' perspective on the subjects addressed herein – such issue will be explained in Part X.

The assumptions and affirmations drawn by some authors in the first part of the framework can have relevant implications in some issues approached in this study. Since we are dealing with SOI in Brazilian multinationals, for instance, it is important to provide

some information that relates to the development of innovation in subsidiaries of multinational corporations. Presenting arguments about autonomy, integration between headquarters and subsidiaries, and strategic relevance is valuable considering that in Section X we will present the results of a study that analyzes the presence of CSR in Brazil according to subsidiaries of foreign companies operating in this country. Since autonomy, integration and strategic relevance are aspects inherent to multinationals, we considered important to cover them herein.

Illustration 19 - Relationship among the topics explored in the research

Source: Pinto (2017).

Strategy is an important asset in multinationals. In the current competitive scenario, companies need to develop strategies in order to remain on the market, keeping ahead of competition. That way, it is possible to affirm that determining a strategy in a multinational corporation is a crucial factor for its survival. If this strategy is related to the autonomy of the subsidiary, for instance, then it might be possible to affirm that in

determined markets and industries, having an autonomous subsidiary is a matter of strategy; in other cases, centralization may be the better option. The issues related to autonomy, strategic relevance and integration were brought up herein since we consider these aspects as relevant assets related to the competitiveness of multinationals as a whole.

Even though one can observe the quotation of relatively old academic articles (Ghoshal & Nohria, 1989; Bartlett & Ghoshal, 1992; Roth & Morrison, 1992; Morrison & Roth, 1993; Birkinshaw et al., 1998; Bresman, Birkinshaw & Nobel, 1999; Porter & Linde, 1995; Porter 1986), their use is due to their relevance in academic discussions; that way, they could not be left out of this theoretical framework. It was also important to mention the authors in this part because it indicates the theoretical guideline of the research.

After this introductory part, we proceeded with the literature review by approaching in details emerging market multinationals. Bringing up such matter was very relevant for our research, considering that Brazil is an emerging market and part of the BRICs. First, we introduced the subject by presenting similar characteristics of emerging markets, such as high GDP growth rates and an increasing middle class. We pointed out, however, that not every emerging market grow at the same pace: over the last years, Brazil and Russia, for example, presented negative GDP growth rates. In the Brazilian case, a possible explanation can be related to the political and economic crisis occurring since 2014. One common characteristics of emerging market countries is that they all learned how to navigate turbulent waters due to institutional characteristics and challenges, which made emerging market companies ready to operate beyond borders.

Not only emerging market multinationals, i.e. BRIC's multinationals, share similar features; there are also similar characteristics among Latin American companies, which stimulated us to provide a separate chapter to deal with such matter. Latin American countries went through serious institutional challenges in the past, specially related to high inflation rates and currency depreciation. Companies that prospered in the home markets, despite the domestic challenges they had to face, became ready to compete with other companies in an international environment.

In order to deal specifically with Brazilian multinationals, we developed one chapter to handle such subject separately. Since our study relies on Brazilian

multinationals, a.k.a. BRMNCs, it was important to provide information regarding the emergence of such companies, the national context from which they emerged, and some information regarding the largest Brazilian multinationals in terms of transnationality.

The following parts of the theoretical framework focused on the other relevant matters of the study: CSR and SOI. As it has been indicated herein, it is not hard to find one single definition for each one of these terms; considering they involve social and environmental characteristics, which may differ across countries and nationalities, there is no clear consensus about their meaning. The several definitions and implications found in the literature complement one another and enable relevant insights on such matters. This last part of the literature review is relevant for our study because the variables we used to accomplish the multivariate analysis are related to statements that address different topics on CSR and SOI.

Considering we covered all relevant aspects for the study, we will proceed our analysis by presenting the conceptual model of the research, as well as the following Sections: Hypotheses, Methodology, Presentation and analysis of results, and Conclusion.

2.5 – Conceptual model of the research

In the literature review presented herein, we approached the issues we intend to address with our research. The main topics of the research are Brazilian multinationals and CSR; there are, however, specific topics we intend to approach regarding CSR. In order to demonstrate the conceptual model of our research, we elaborated the illustration below, in which it is possible to analyze the topics we intend to approach, as well as the main variables of the study.

Illustration 20 - Conceptual model of the study

Source: Pinto (2017).

HYPOTHESES

3. Hypotheses of the research

3.1 Hypothesis for CSR and SOI

In this section, we will present the hypotheses developed in our research. It is necessary to provide one particular section to bring up such hypotheses, considering they are the result of the analysis of the information presented in the literature review. The initial intention of the study was to present and to position Brazilian multinationals in the world market. That is why we provided the reader with some extra background on the emergence of internationalization, the evolution of emerging market multinationals and multilatinas, and, finally, the development of Brazilian multinationals.

Even though there are several issues to explore regarding Brazilian multinationals given their latecomer characteristics and particular institutional environment (Cyrino & Tanure, 2009; Fleury & Fleury, 2007), we focused our analysis on the social and environmental characteristics that such companies can have when operating abroad through the analysis of CSR. Considering the strategic aspects of CSR (Falck & Heblich, 2007; Cochran, 2007; Porter & Kramer, 2002; Aligleri, Aligleri & Kruglianskas, 2009, Griffiths & Wall, 2012, among others), we recognize there is a gap in the literature regarding CSR accomplishments carried out by emerging market companies, given that scholars tend to focus the analysis of CSR in developed country companies (Welford, 2010).

In order to address these issues, two were accomplished during this study. The first one focuses on analyzing and exploring the presence of CSR in Brazilian multinationals. Therefore, we developed a theoretical framework that covered the main issues related to CSR, considering that it is an important strategic asset for companies. In consideration of the other step, we divided the variables established in CSR into categories, i.e. constructs. The variables related to SOI were also transformed into a construct. That way, it becomes better for us to illustrate results; both analysis and discussion become, therefore, more dynamic. Based on the Cronbach's alpha presented

by each variable – such matter will be explored with further details in Section 4 – it was possible to group CSR variables into three distinct groups.

The first group, called herein Guidelines for multinationals, incorporates not simply the guidelines proposed by OECD (2011) when suggesting basic directions and instructions for multinationals to behave in responsible ways. It is important to point out we did not simply replicate and reproduce the guidelines elaborated by OECD (2011); we chose certain affirmations that were also supported by scholars and researchers approached in the literature review. The second group, known as Regulation, involves three variables directly related to the presence of regulation and norms in the countries in which Brazilian companies operate. The third and last group, CSR as differentiation, brings three variables used in a previous study accomplished by Boehe and Cruz (2010) and one variable developed by Pinto, Oliveira Jr and Borini (2013) when analyzing the importance of CSR as a relevant strategic differentiation feature and the development of CSR by subsidiaries of foreign multinationals in Brazil, respectively.

We aim to analyze, nevertheless, the relationship between CSR and SOI as well. Considering that CSR is actually constituted by three different constructs, four variables constitute the variable SOI. In order to create such construct, the Cronbach's alpha was also analyzed and presented satisfactory results. The variable SOI involves issues related to the management of natural resources, innovative solutions, importance of stakeholders, and social and environmental aspects when considering innovation.

We believe that grouping the variables into constructs was a good method to present results and to elaborate hypotheses, since it is clear for the reader what we intend to research and how we intend to approach it. We will describe below each of the hypothesis we intend to address in this study.

3.1.1 CSR and Brazilian multinationals

The literature review presented herein on CSR covers all the topics we intend to explore in our research. The construct Guidelines for multinationals indicates certain behaviors that are expected from multinationals, considering they wish to maintain a reputation of being socially and environmentally responsible, besides pursuing pursue a

strategic advantage from such behavior. It is necessary to disclose, however, that we did not replicate all the guidelines for multinationals proposed by OECD (2011); we selected some guidelines and some recommendations, which were also underpinned by other researches approached in the theoretical framework. According to OECD (2011) to reduce the social and environmental problems the multinational causes is a very important issue, which should be given priority in these companies. Gonçalves-Dias & Teodósio (2011) and Bertonecello & Chang Jr. (2007) also emphasize the importance of environment preservation and the reduction of environmental risks by multinationals.

The publication of social and environmental reporting is also very relevant for companies that pursue CSR (OECD, 2011; Griffiths & Wall, 2012; Lassere, 2012); letting the community, i.e. all stakeholders, know about actions towards sustainability demonstrates that a company cares about the community, while avoiding reputational damage. Reporting is also a way for the stakeholders to monitor the activities of a company; it indicates, in fact, a win-win situation: reporting is beneficial for the community, considering they become more aware of the achievements of multinationals and can demand a more responsible behavior from them, and for the company, which can monitor its own performance, while enhancing and improving its sustainability-oriented goals.

Another relevant issue with regard to CSR refers to the proper training of employees. Involving employees in decision-making processes and in important issues related to social and environmental responsibility is a way of giving legitimacy to responsible initiatives within the company. Employees need to be aware of what the company stands for so that sustainability-driven values can become something the employee internalizes. OECD (2011) recommends multinationals to provide their employees with the proper educational level on environmental, health and safety issues; the training of employees with regard to handling hazardous materials, the prevention of environmental accidents, and other aspects of management, e.g. procedures of evaluation of environmental impact, public relations, and environmental technologies, is also very relevant. Bertonecello & Chang Jr (2007) emphasize the relevance and involvement of

employees in companies, especially in CSR matters; the authors accentuate higher investments in labor safety and professional development.

Corruption is another matter brought up when it comes to the responsibilities of the multinational company. The guidelines for multinationals provided by OECD (2011), for instance, provide one chapter exclusively to handle corruption issues. Lassere (2012) also provide an extensive explanation on the reasons for corruptions, how to avoid corrupt practices, and anti-corruption measures (reports and audits). Considering that anti-fraud measures are also a way of avoiding corruption, we considered such item in our analysis. Rathert (2016) also implicates the role played by the institutional environment when keeping multinationals from involving with corrupt practices; corruption can be considered, therefore, a relevant CSR issue (Ako, 2013).

There are several researchers and scholars that mention the importance of regulation when it comes to CSR issues (Eberlein & Matten, 2009; Husted & Allen, 2006; Carroll & Shabana, 2010; Campbell, 2007; Yang & Makhija, 2014; Bursztyn & Bursztyn, 2012; Gonçalves-Dias & Teodósio, 2011; Porter & Linde, 1995; Abramovay, 2007; Abramovay, 2008; Nidumolu, Prahalad & Rangaswami, 2009; Tan, 2009; Eweje, 2009). Falck and Heblich (2007), for example, mention that there is no common sense of responsibility for companies; the social order is no longer enough to ensure that companies have a proper (responsible) behavior in their actions; that is why the emergence of CSR is necessary.

The particular issue regarding local demands, regulation and legislation is brought up by Young and Makhija (2014), Eweje (2009) and Tan (2009), in which it becomes clear that it is necessary to comply with local requirements. If a company does comply with local regulations and goes beyond what is demanded by the law, the company becomes proactive; i.e. it tends to be ahead competitors, enjoying better competitive advantages. Being ahead of competitors and acting before the law demands, brings up the concept of proactivity, defended by Carroll and Shabana (2010), Abramovay (2008), Nidumolu, Prahalad and Rangaswami (2009), Griffiths and Wall (2012), and Campbell, Eden and Miller (2012). Proactive companies tend to present better performances in CSR because they are always ahead of the law. That way, they will not suffer from penalties and sanctions, and will not have their reputation ruined.

The issue brought up about operating in countries that demand CSR was developed based on the research presented by Pinto, Oliveira Jr and Borini (2013). In their article, it became clear that subsidiaries of foreign multinational corporations operating in Brazil did not apply the same CSR that their countries of origin predicted. Companies that were socially and environmentally responsible in Brazil did it because: i) they wanted to be known and recognized for being responsible and wanted to take advantages from such status; or ii) they were operating according to the local regulation of certain industries. That way, since we are dealing with Brazilian multinationals in terms of CSR, we considered this variable relevant for the study.

The last construct, related to CSR as differentiation, brings up three variables developed by Boehe and Cruz (2010) and one variable developed by Pinto, Oliveira Jr and Borini (2013). The authors imply that Brazilian exporters realized that CSR was not an extra expenditure, but a way to differentiate products from competitors while acquiring a unique competitive advantage. When applied by Pinto, Oliveira Jr and Borini (2013), these variables measured CSR as differentiation for subsidiaries of foreign multinationals operating in Brazil. According to Boehe and Cruz (2010), the following variables could measure if the company sees CSR as differentiation: to have social/environmental certifications, to have a reputation for being socially responsible, to work with certified suppliers. The fourth variable of this construct, related to training activities with suppliers and clients, was applied in the study accomplished by Pinto, Oliveira Jr and Borini (2013). Abramovay (2007), for instance, emphasizes the importance of involving suppliers in CSR matters.

We do believe that, based on the information brought up in the literature review, the variables showed herein can somehow correlate. Considering possible relationship between the enforcement of regulation in order to assure the compliance with the guidelines for multinationals, the following hypothesis was developed.

H1: The more Brazilian multinationals follow the guidelines for multinationals, the more they comply with CSR regulations.

According to the information exposed herein, a company that considers CSR an important differentiation asset is a responsible company that recognizes CSR as a relevant strategic resource, which enables the differentiation from other competitors. One may infer, therefore, that companies that recognizes the differentiation potential of CSR can also be in accordance with the guidelines for multinationals. In order to explore such relationship, the following hypothesis was developed.

H2: The more Brazilian multinationals follow the guidelines for multinationals, the more they consider CSR as a differentiation strategy.

The importance of complying with regulations and laws is relevant for companies that pursue CSR. As mentioned by Campbell, Eden and Miller (2012), complying with the law and having a proactive attitude may bring some gains and a competitive advantage for these companies. That way, it is possible to infer that companies that comply with regulation are also getting competitive advantage. The same way, as proposed by Boehe and Cruz (2010), companies that follow the three indicators they propose are also likely to enjoy competitive advantage through differentiation. Given the correlation between these two statements, we intend to explore how the relationship between regulation and differentiation turns up. Therefore, we developed the following hypothesis.

H3: The more Brazilian multinationals comply with CSR regulations, the more they consider CSR as a differentiation strategy.

3.1.2 Guidelines for multinationals and SOI

We presented in the previous parts the origin of the constructs of the variables related to CSR; we will now focus on the construct SOI – constituted by four variables –

with further details. The variables of SOI were also grouped into this construct based on the Cronbach's alpha.

Porter and Linde (1995) explored the relevance and the relationship between innovation and sustainability. The authors claim that innovation is the answer for sustainability; i.e. companies that take into account sustainable aspects are the ones more prone to prosper in the future. There is, therefore, a strong link between environmental improvement and competitiveness. Based on the assumptions indicated by the authors, the first variable was developed, which analysis if the company is able to differentiate from competitors due to innovations that take into account social and environmental aspects. Even know the innovation is not called SOI in the article developed by Porter and Linde (1995) – as it is believed the term did not exist back then – we consider their definition is in accordance with what the term proposes nowadays.

The statements made by Hansen, Grosse-Dunker and Reichwald (2009) influenced us to create the second variable. According to the authors, SOI entails a concern about the whole supply chain, which involves supplier and the concern about natural resources and sustainable inputs moving downstream. Despite not addressing SOI subjects, Abramovay (2007) emphasizes the role played by suppliers in CSR issues and the importance of involving the whole supply chain in sustainable businesses. That way, it was possible to create the second SOI variable: when developing new products and processes, the company aims to manage natural resources in a better way while using sustainable inputs.

The third variable is related to an article published by Nidumolu, Prahalad and Rangaswami (2009) and to the article published by Porter and Linde (1995). In both papers, it is clear how important and relevant it is to develop innovation with a sustainability focus. Porter and Linde (1995) highlight the need to develop innovation, as well as the need for companies to obtain some sort of environmental involvement to remain competitive (or simply to survive in the market). Nidumolu, Prahalad and Rangaswami (2009) also indicate five stages of change, which indicate what a company can do in order to develop SOI; that way, they somehow imply that companies have to search for innovative solutions, especially the ones that take into account sustainability

aspects. The information provided by these authors enabled the establishment of the third SOI variable: the company encourages sustainability-oriented innovation and challenges employees to find innovative solutions for new products and processes.

In several parts of this study, we mentioned the importance of stakeholders in sustainable issues (Gonçalves-Dias & Teodósio, 2011; Yang & Rivers, 2009; Griffiths & Wall, 2012; Instituto Ethos (2001); Fedato, 2005; Bossle et al., 2016). It is not different when it comes to SOI. According to Klewitz and Hansen (2011), stakeholders play extremely stimulating roles when it comes to SOI; stakeholders are the ones who demand companies to develop sustainability-related concerns. At the same time, the authors emphasize that SOI needs to consider the entire life cycle of the value chain, which involves several stakeholders, from resource extraction until the end consumer and end-of-life of products. That way, we intend to verify the fourth and last SOI variable: the company seeks to know the perceptions and concerns of different stakeholders in the process of developing new products and processes.

Now that all SOI variables have been clarified, it is time to explain what we intend to verify with our hypothesis. Considering the relevance of innovation for the survival of companies, especially SOI, which involves a strong strategic approach, we intend to explore and analyze the relationship between SOI and guidelines for multinationals, considering that multinationals that follow the guidelines are the ones more likely to develop CSR in its management. That way, we developed the following hypothesis.

H4: The more Brazilian multinationals develop SOI, the more they follow the guidelines for multinationals.

3.1.3 Compliance with regulations and SOI

The compliance with regulation indicates that companies want to obtain a position of advantage by being in accordance (or being proactive) with the law while avoiding problems with bad reputation for irresponsible practices or with penalties or sanctions imposed for damaging the environment or the society in which it operates. The same way, in accordance with Porter and Linde (1995), companies investing in innovation and

environmental improvement are also likely to obtain competitive advantages. The authors also point out that fighting regulation may entail bad consequences to the company. Environmental improvement is, according to them, an economic and competitive opportunity, without indicating additional costs or an inevitable threat.

Considering the relationship between Construct 2, Regulation, and SOI when it comes to competitive advantages and reinforcement of the importance of regulation, the following hypothesis was developed.

H5: The higher the development of SOI by Brazilian multinationals, the higher the compliance with CSR regulations.

3.1.4 CSR as differentiation and SOI

The three variables brought by Boehe and Cruz (2010) and the one variable applied by Pinto, Oliveira Jr and Borini (2013) do not mention any sort of innovation. The variables developed by these authors analyze differentiation advantages a company can obtain when adopting and developing CSR characteristics. Considering that SOI also implies in having advantages by pursuing the elaboration of innovations that take into account social and environmental aspects, we developed the sixth and last hypothesis of the study.

H6: The more Brazilian multinationals develop SOI, the more they tend to consider CSR as a differentiation strategy.

3.2. Synthesis of the hypotheses

In order to illustrate the hypotheses developed in our study, we elaborated the table below. In the table, it is easier and clear to perceive what each one of the hypothesis analyzes and what it stands for.

Table 22 - Hypotheses of the study

	<i>Hypothesis</i>
<i>CSR and Brazilian multinationals</i>	<p>H1: The more Brazilian multinationals follow the guidelines for multinationals, the more they comply with CSR regulations.</p> <p>H2: The more Brazilian multinationals follow the guidelines for multinationals, the more they consider CSR as a differentiation strategy.</p> <p>H3: The more Brazilian multinationals comply with CSR regulations, the more they consider CSR as a differentiation strategy.</p>
<i>Guidelines for multinationals and SOI</i>	H4: The more Brazilian multinationals develop SOI, the more they follow the guidelines for multinationals.
<i>Compliance with regulations and SOI</i>	H5: The higher the development of SOI by Brazilian multinationals, the higher the compliance with CSR regulations.
<i>CSR as differentiation and SOI</i>	H6: The more Brazilian multinationals develop SOI, the more they tend to consider CSR as a differentiation strategy.

Source: Pinto (2017).

METHODOLOGY

4. Methodology

4.1 Strategy and methodological procedures

Methodology is considered a very relevant part of a study, since it indicates the main procedures and techniques used to accomplish a research. It is important to let the reader aware of basic information about the research: sample, data collection procedures, methodological approach, and so on.

In order to accomplish a research, it is necessary to establish strategies and methodological procedures that enable the researcher to explore the implications suggested by the objectives and hypotheses of the study. Methodology is not only essential to carry out a study, but it is also important to identify proper procedures and different types of analysis (Coelho, 2014).

The research problem we intend to approach involves analyzing CSR in Brazilian multinationals. What motivates this research and guides the research is how Brazilian multinationals behave with regard to CSR, especially analyzing aspects that relate CSR and SOI. It is possible to affirm that the study presents a descriptive focus of the problem, considering that the study aims to analyze the phenomenon of Brazilian multinationals, internationalization of these companies, CSR, and SOI. It is the objective to describe such behavior.

Considering the approach of the research, it is possible to infer that scientific researches can have either a qualitative, a quantitative, or a mixed-method approach. The qualitative approach is used to discover and refine research questions, without the need to provide empirical support for hypotheses; a quantitative approach is related to the data collection and data analysis in order to answer research questions and to provide empirical support for hypothesis by using statistics; and, finally, the mixed methods research, which integrates both previous approaches, involving inductive and deductive thinking (Sampieri et al., 2006).

In a quantitative research, one or several hypotheses are established, a plan is elaborated in order to provide empirical support, the concepts involved in the hypotheses (variables) are measured and convert measurements into number to be analyzed by using statistical techniques (Ibid.). Through the use of statistical instruments, it is possible to affirm that the quantitative approach offers precision of results, avoiding misinterpretation. Such approach is usually used in surveys in order to understand the behavior of a population by using a sample (Raupp & Beuren, 2006). It is possible to conclude, therefore, that quantitative studies are associated with experiments, to researches or to studies in which standardized measurement tools are used (Sampieri et al., 2006).

Considering that our research aims to understand a determined research issue and, consequently, try to verify a determined number of hypothesis based on the results properly calculated obtained through a survey, it is possible to characterize our study as predominantly quantitative. The most adequate procedure adopted herein for data collection was the conduction of a survey with the headquarters of Brazilian multinationals, keeping in mind it is a technique that allows the empirical verification of the problem studied (Babbie, 2001).

Considering that we want to study the relationship among variables of corporate social responsibility in Brazilian and between these variables and SOI, it is also possible to characterize our study as correlational. The purpose of a correlational study is to evaluate the relationship between two or more concepts, categories, or variables (Sampieri et al., 2006); in our case, the relationship between guidelines for multinationals and SOI, for instance.

It is also possible to infer that our study has an exploratory focus, for handling correlations that have not been studied yet, an a descriptive focus, whose research plans measure the characteristics described in a research issue (Hair Jr et al., 2005).

4.1.2 About the survey: sample, questionnaire, pre-test, and data collection

We decided to conduct a survey in our study in order to describe both behavior and characteristics of Brazilian multinationals regarding CSR and SOI. According to

Babbie (2001), the conduction of surveys in academic studies present several benefits: the data obtained enables logical thinking; samples used in surveys can indicate the behavior of a certain population; explanatory analysis in survey researches aim to develop general propositions on human behavior; surveys provide greater understanding by using a small number of variables, among others.

Freitas et al. (2000) affirm that a survey can be described as the collection of information (characteristics, opinions, etc.) of a certain group of individuals through a research instrument, which is usually a questionnaire. On the one hand, Babbie (2001) affirms that a survey aims to describe and explain a determined phenomenon in the society. On the other hand, Freitas et al. (2000) affirm that the main purpose of a survey is to elaborate quantitative descriptions of a population by using a predefined instrument. It is clear that these two definitions are not excluding; they are complementary.

Pinsonneault and Kraemer (1993) highlight the importance of defining survey and survey research. According to them, a survey means simply gathering information about the characteristics of population, while a survey research is more related to the elaboration of quantitative descriptions of a determined population by analyzing relationships among variables. In that sense, it is possible to conclude that we conducted herein a survey research, and not a survey.

Surveys are used when the research project involves the collection of information of large sample (Hair Jr et al., 2005). In order to fulfil the survey, we used an online questionnaire, which enabled a more refined data processing while being less expensive and providing a faster response time than paper-based questionnaires.

It is also important to point out that we accomplished a cross-sectional study, in which the data is collected at a specific point in time. Fávero et al. (2009) define cross-sectional study as a model in which data is collected based on the observations of a sample in a determined period; such choice does not affect the logics of the statistical technique. It was not possible to accomplish a longitudinal study, in which the data collection occurs in specific periods in order to analyze the evolution or the changes of some variables or the relationships among them (Freitas et al., 2000)

4.1.2.1 Sample

The information of a survey is usually collected from a fraction of the population (sample) in a way that one can generalize the findings to the population (Pinsonneault & Kraemer, 1993). When choosing a sample, it is necessary to define the unit of analysis. To define about what or whom data will be collected depends on the approach of the research, the research problem and the types of study – once this issue is solved, it is possible to delimit the population. In quantitative researches, the sample is a subgroup of the population, which has to be representative (Sampieri et al., 2006).

We identified that there are currently 287 Brazilian multinationals. This number represents the population of the study. This number of companies does not come from any sort of official or government report; we reached this amount during several researches accomplished through some documents provided by FDC, Revista PIB and Observatório das MNC brasileiras⁵. The survey approached, however, only 62 companies.

The 62 companies that answered our survey represent 20.9% of the population. After eliminating questionnaires with missing data, we reached the number of 60 companies.

It is necessary to distinguish herein the two types of sample: probabilistic and non-probabilistic. In probabilistic samples, all elements of the population present the same possibility of being chosen, which results in a representative sample of the population (Freitas et al., 2000). Non-probabilistic samples indicate that the selection of elements does not depend on probability, but on specific characteristics that the researcher aims to address; in other words, there is a procedure of informal selection (Sampieri et al., 2006). This sort of sample indicates that results cannot be generalized, but it is an effective research method when the respondents are hard to be approached (Freitas et al., 2000). It is possible to affirm that, despite non-probabilistic, we used a convenience sample,

⁵ These citations are not present in the references; there are no official documents published by these entities with regard to the number of Brazilian multinationals.

considering that participants were not randomly chosen; they were chosen according to their availability to take part in our research.

4.1.2.2 Questionnaire

The main way of collecting information is to ask people structured and predefined questions; their answers become, therefore, the data to be analyzed (Pinsonneault & Kraemer, 1993). In our study, we used an electronic survey, which consisted of a close-ended questionnaire sent to managers responsible for the areas of internationalization of the selected Brazilian multinationals.

It is important to mention herein that the questionnaire was sent to managers from the headquarters located in Brazil; it was not feasible to interview managers from the subsidiaries of the Brazilian multinationals. Stefanini, for instance, has subsidiaries in 38 different countries; Weg in 29; Magnesita, Marcopolo and Vale in 25 different countries (FDC, 2016). That way, it would not be possible to reach managers from all these different countries.

The questionnaire had 75 questions in total, divided into six different sections: General Information, Managerial Style, Competencies, Innovation, Sustainability, and Model of International Management. In our analysis, we used some questions referring to sustainability (12 questions) and three questions from innovation (SOI). We did not use all the questions related to sustainability because one of them presented a very different Cronbach's alpha from the other ones and could not be grouped in any construct. The platform used to host the online questionnaire was SurveyMonkey.

Table 23 - Questionnaire of the research

<i>Questionnaire</i>	<i>Questions</i>
<i>Part 1 – General Information</i>	Section 1 – Name, company, e-mail and telephone number Section 2 – Service years

	Section 3 – Job position
<i>Part 2 – Managerial Style</i>	16 questions (Likert-scale)
<i>Part 3 – Competencies</i>	15 questions (Likert-scale)
<i>Part 4 – Innovation</i>	12 questions (Likert-scale)
<i>Part 5 – Sustainability</i>	13 questions (Likert-scale)
<i>Part 6 – Model of International Management</i>	12 questions (Likert-scale)
	4 multiple choice questions

Source: Pinto (2017).

It is important to clarify that we are part of a group of researchers and professors from the Fundação Getúlio Vargas (EAESP) and the University of São Paulo (FEA). Such research group was created in order to identify and analyze the behavior of Brazilian multinationals currently active abroad. The professors that coordinated such research group and project were: Maria Tereza Leme Fleury (EAESP-FGV and FEA-USP), Afonso Fleury (POLI-USP), Moacir de Miranda Oliveira Junior (FEA-USP), Felipe Mendes Borini (FEA-USP), and Germano Glufke Reis (EAESP-FGV).

There were previously other partnerships between these two institutions – also between FEA-USP and ESPM, for instance – not only in order to examine the behavior of Brazilian multinationals abroad, but also to investigate the operation of foreign multinationals in Brazil. In 2010, for example, another project was developed by both institutions, in which several aspects of the subsidiaries of foreign multinationals were evaluated, e.g. autonomy, strategic relevance, and governance.

That way, each researcher/professor was responsible for one specific part of the questionnaire conducted herein. We approached in this study, therefore, the part of the questionnaire developed by us, which is related to corporate social responsibility and sustainability issues. There was no restriction in using questions from different parts of the questionnaire, but we decided to stick to the parts we developed in order to avoid duplicate results in different studies or academic articles.

The partnership between the two above-mentioned institutions were essential for the fulfilment of our study. There was not only a mutual effort to obtain answered questionnaires from the multinationals, but also a constant exchange of information among researchers and professors.

4.1.2.3 Data collection

As mentioned in Section 4.1.2.2, in order to fulfil the objectives of the study, we used an electronic survey with a close-ended questionnaire. It is important for us to emphasize that the data collected herein are part of a broader research project that aims to study Brazilian multinationals. The leaders of such project are Maria Tereza Leme Fleury (EAESP-FGV and FEA-USP), Afonso Fleury (Poli-USP), Moacir de Miranda Oliveira Junior (FEA-USP), Felipe Mendes Borini (FEA-USP), and Germano Glufke Reis (EAESP-FGV). Such faculty group was part of another project called GINEBRA (Entrepreneurial Management for the Internationalization of Brazilian Companies), which occurred between 2005 and 2010. The survey that gave rise to the data used herein was a further development of other surveys previously conducted by this group of researchers.

As an instrument of measurement and collection of quantitative data, we used a Likert scale, in which affirmations are drawn and for each one of them the individual has to express their reaction by choosing one of the five-point items (Sampieri et al., 2006). In our case, the scale goes from ‘strongly disagree’ to ‘strongly agree’.

Before collecting the data for the research, the procedure of pre-testing was conducted. The purpose of the pre-test is to select a few interviewees to answer a determined questionnaire in order to identify possible errors or misunderstandings in the questions. In our case, the pre-test was accomplished with three Brazilian multinationals in December 2014; after a few corrections in the wordiness of the text, the survey was officially conducted.

We started to collect data, e.g. to conduct the survey, from January 2015 until June 2015. We elaborated a list of companies with the name of the responsible employee for internationalization, as well as their personal phone number and e-mail. First, we made phone calls, introducing ourselves and giving further information about the survey and the purpose of our research. After agreeing in participating, we would send the employee/manager an e-mail with all information and the access to the link that would

redirect them to the online questionnaire. If the employee/manager did not answer within seven days, we would make another phone call and so on.

It is important to mention that it was not easy to collect data from Brazilian multinationals. Some managers seemed a bit suspicious about taking part in a survey that would bring up aspects related to their competitiveness. Besides, as exposed in previous Sections, Brazilian companies are not usually joint-stock companies and/or family-controlled (Fleury & Fleury, 2014; Casanova & Fraser, 2009a). Since they seem to be more closed, some employees were not willing to give any information.

After examining the questionnaires carefully, we discarded questionnaires that presented incomplete information, which could damage the result of the research. After selecting valid data, we accomplished the codification, which is an operational technique used to categorize data that present a relationship among one another. That way, data is transformed into symbols, which can be tabulated and counted. At last, we accomplished the tabulation, in order to present the data in tables, which enables the verification of the inter-relationship among the (Marconi & Lakatos, 2007). Due to the number of respondents, the tabulation will be accomplished through a software.

In order to analyze data, we will use multivariate analysis, in which it was possible to analyze the relationship among dependent and independent variables. Considering that such method presents a high complexity level, analysis will be conducted through a software that uses statistical packages; in our case, SPSS (version 20.0.0). According to Hair Jr et al. (2009), multivariate analysis refer to all statistical techniques that analyze simultaneously multiple information about individuals or phenomena; therefore, any simultaneous analysis that encompasses more than two variables can be considered multivariate.

The data obtained will be later represented by illustrations and tables, which are systematic statistical methods that enables the understanding and interpretation of data (Marconi & Lakatos, 2007).

Considering that multivariate analysis was used for accounting data, it is important to mention the use of two distinct techniques: multiple linear regression and canonical correlation. Multiple linear regression is an adequate method of analysis for this research, since it involves dependent and independent variables, which can present a relationship among one another (Hair Jr et al., 2009). According to Hair et al. (2009), the purpose of

multiple linear regression is to predict changes in the dependent variable as an answer to changes occurring in independent variables.

The canonical correlation can be seen as an extension of the multiple linear regression analysis, whose purpose is to correlate simultaneously several metric independent variables and several metric dependent variables (Ibid.). When the correlation among these variables is considered high, the existence of multicollinearity has to be verified. One premise of this technique is that there must not be a linear relationship among the variables; when such correlation is high, there is an increase in the statistical error (Fávero et al., 2009), an inefficiency of estimators, inaccurate estimates, and estimators sensitive to small variations in the data (Cunha & Coelho, 2007).

4.1.3 Variables of the study

The variables used to carry out the survey were developed based on the theoretical framework presented herein. The information provided by these variables were transformed into questions and conducted through an online questionnaire, which was used as an instrument of data collection. It is important to mention that, individually, we obtained 15 variables, which were turned into four constructs for two reasons: because it would be easier to show results when grouping similar variables, to and to meet the premises of multiple linear regression according to the number of observations. According to Hair Jr et al. (2009), the number of observations has to be above 30 for multiple linear regressions; usually, however, it is satisfactory to have between 15 and 20 observations for each independent variable. Considering that we only had 60 observations from the survey, it would not be possible to analyze all the variables independently.

Therefore, it was possible to group the variables into four constructs, based on the Cronbach's alpha presented by these variables. That way, the constructs are guidelines for multinationals, regulation, CSR as differentiation, and SOI.

4.1.3.1 Construct 1: Guidelines for Multinationals

This construct is related to several statements presented in the literature review of this study. Even though the OECD (2011) elaborated a document that presents several guidelines for multinationals; we did not replicate all these guidelines in our study. The guidelines for multinationals used herein are a compilation of some directives proposed by OECD (2011) and affirmations made by scholars and researchers when handling multinationals and CSR. The first variable used in this construct, reduction of social and environmental problems, refers to statements mentioned by OECD (2011), Gonçalves-Dias and Teodósio (2011), and Bertoncello and Chang Jr (2007). These authors claim that multinationals have to leverage impacts on the places they operate in, considering that entrepreneurial activities tend to result in negative impacts for the environment and the society. That way, a multinational focused on reducing such impacts tends to be a more responsible company.

Providing social and environmental reports is important because it demonstrates how companies are concerned about informing their stakeholders about activities related to CSR. Stakeholders need to be aware of the advances and/or backlashes, so that they can demand a better or different behavior from companies. That is stated by OECD (2011), Griffiths and Wall (2012), and Lassere (2012), who also emphasize the need to establish a quality standards for such reports. Reports are also a way to involve the community in the company's activities.

When considering sustainability, e.g. CSR issues, one thinks immediately in the need of fulfilling shareholders', government's, and society's needs. However, it is very relevant to involve employees in such process so that CSR initiatives may have some sort of response. If employees are not involved in CSR initiatives, they are no longer considered part of these initiatives and tend to be careless. OECD (2011) and Bertoncello and Chang Jr (2007) emphasize such statement by affirming the need to involve employees in decision-making processes and the need to provide a proper educational level on environmental, health and safety issues for employees.

As mentioned before, there are several scholars that deal with the issue of corruption and multinational corporations. They believe that multinational companies have the duty to fight corruption, especially in developing countries. Therefore, OECD

(2011), Lassere (2012), Ako (2013), and Rathert (2016) highlight the need for multinationals to fight corruption, which is considered a CSR issue; considering that multinationals influence the behavior of the society in which they operate, it is necessary that these companies struggle against corruption practices. It is also important to emphasize the ethical characteristic of such statement. One CSR involves an ethical behavior from companies, involving in corrupt practices automatically turns a company into an ethical institution. Lassere (2012), for instance, emphasize the need to develop anti-corruption systems in order to prevent such practice. We believe, therefore, that investing in anti-fraud communication channels is a way of preventing corruption in the corporative sphere.

Table 24 - Construct 1

<i>Guidelines for multinationals</i>	<i>Variable</i>	<i>Cronbach's alpha</i>	<i>References</i>
<i>Reduction of social and environmental problems</i>	GM1	0.760	OECD (2011); Gonçalves-Dias & Teodósio (2011); Bertoncello & Chang Jr (2007)
<i>Social and environmental reports</i>	GM2	0.704	OECD (2011); Griffiths & Wall (2012); Lassere (2012)
<i>Proper training for employees</i>	GM3	0.718	OECD (2011); Bertoncello & Chang Jr (2007)
<i>Anti-fraud communication channels</i>	GM4	0.778	OECD (2011); Lassere (2012); Ako (2013); Rathert (2016)

Source: Pinto (2017).

4.1.3.2 Construct 2: Regulation

Regulation is important because it is believed that companies do not tend to be responsible, unless they have to comply with some sort of regulation in order to avoid fines and penalties (Husted & Allen, 2006). The variables used in this construct are somehow interrelated, considering they mention the compliance with the law, demand for

CSR and proactivity. The main argument of the main scholars approached in this matter imply somehow that CSR exist because there is some sort of regulation. In that sense, in unregulated countries and/or sectors, companies tend to be less responsible. According to them, most companies are not naturally sustainable nor see the possibility of CSR as a competitive advantage; first, they want to comply with the legislation, then they start seeing CSR as a strategic asset.

Table 25 - Construct 2

<i>Regulation</i>	<i>Variable</i>	<i>Cronbach's alpha</i>	<i>References</i>
<i>Legislation and local demands</i>	Regul1	0.606	Young & Makhija (2014); Eweje (2009); Tan (2009)
<i>Operation in countries that demand CSR</i>	Regul2	0.826	Pinto, Oliveira Jr & Borini (2013)
<i>Proactivity regarding compliance of local regulations</i>	Regul3	0.604	Carroll and Shabana (2010); Abramovay (2008); Nidumolu, Prahalad & Rangaswami (2009); Griffiths & Wall (2012); Campbell, Eden & Miller (2012); Abramovay (2008)

Source: Pinto (2017).

4.1.3.3 Construct 3: CSR as differentiation

Three variables used in this construct came from variables elaborated by Boehe and Cruz (2010) in a survey applied by them that approached CSR, product differentiation strategy and export performance. The scholars developed three indicators to measure the construct of product differentiation according to CSR characteristics. In a different study, Pinto, Oliveira Jr and Borini (2013) conducted the same survey in order to identify CSR

in subsidiaries of foreign multinationals operating in Brazil and included one more variable (suppliers/clients). The following three indicators developed by Boehe and Cruz (2010) were used in the construct: (8) owning a social or environmental certification, (9) having a reputation of being socially and environmentally responsible, (10) having employment contracts with certified suppliers. The final variable of the construct was elaborated by Pinto, Oliveira Jr and Borini (2013): (11) accomplishing training activities with suppliers and clients. The authors believe that involving these stakeholders in issues related to CSR is important for a company and can provide a competitive differentiation.

Table 26 - Construct 3

<i>CSR as differentiation</i>	<i>Variable</i>	<i>Cronbach's alpha</i>	<i>Reference</i>
<i>Social/environmental certification</i>	Dif1	0.649	Boehe & Cruz (2010)
<i>Reputation of being responsible</i>	Dif2	0.669	Boehe & Cruz (2010)
<i>Certified suppliers</i>	Dif3	0.633	Boehe & Cruz (2010)
<i>Training activities with suppliers/clients</i>	Dif4	0.634	Pinto, Oliveira Jr & Borini (2013); Abramovay (2007)

Source: Pinto (2017).

4.1.3.4 Construct 4: SOI

Several references on sustainability-oriented innovation were used in order to create the variables of these constructs. More specifically, we approached four different variables. The first variable, related to the responsible management of natural resources

and use of sustainable inputs, refers to statements drawn by Hansen, Grosse-Dunker and Reichwald (2009). That way, the author leads the reader to conclude that companies developing SOI manage their natural resources responsibly and work with sustainable inputs. The same way, information on innovative solutions for process and products were approached by Nidumolu, Prahalad and Rangaswami (2009) and Porter and Linde (1995); the relevance of stakeholders in SOI was approached by Klewitz and Hansen (2011). The last variable of this construct was based on affirmations made by Jay and Gerard (2015) and Porter and Linde (1995). When correlating environmental responsibility and innovation, the authors came to the conclusion that innovation is crucial and that responsible companies are more likely to benefit from a position of competitive advantage.

Table 27 - Construct 4

<i>Sustainability-oriented innovation</i>	<i>Variable</i>	<i>Cronbach's alpha</i>	<i>References</i>
<i>Management of natural resources and sustainable inputs</i>	SOI1	0.752	Hansen, Grosse-Dunker & Reichwald (2009)
<i>Innovative solutions for processes and products</i>	SOI2	0.792	Nidumolu, Prahalad & Rangaswami (2009); Porter & Linde (1995)
<i>Importance of stakeholders</i>	SOI3	0.817	Klewitz & Hansen (2011)
<i>Innovation that takes into account social and environmental aspects</i>	SOI4	0.862	Jay & Gerard (2015), Porter & Linde (1995)

Source: Pinto (2017).

4.1.3.5 Methodological remarks about the constructs

In order to analyze the consistency of the constructs proposed herein, as well as their empirical coherence, we used the Cronbach's alpha to estimate the reliability of the test. Cronbach's alpha is defined as a reliability measurement that varies from 0 to 1 – the values between 0.60 and 0.70 are considered the lower limit (Hair Jr et al., 2009). In exploratory researches, Hair Jr et al. (2009) affirm that 0.60 is an acceptable number. Considering our research has an exploratory focus for handling correlations that have not

been studied yet, 0.6 is an acceptable value. Table 28 demonstrates the Cronbach's alpha of the constructs, since we already demonstrated the alpha of each variable independently in the sections above.

Table 28 - Cronbach's alpha of the constructs

<i>Construct</i>	<i>Cronbach's alpha</i>
<i>Guidelines for multinationals</i>	0.794
<i>Regulation</i>	0.752
<i>CSR as differentiation</i>	0.710
<i>SOI</i>	0.850

Source: Pinto (2017).

As one can see, SOI is the construct that presents the best result (0.850) considering that 0.850 closer to 1. The second best result is represented by Construct 1, Guidelines for Multinationals (0.794), followed by Construct 2 (0.752), Regulation, and Construct 3 (0.710), CSR as Differentiation.

PRESENTATION AND ANALYSIS OF RESULTS

5. Presentation and analysis of results

In order to accomplish the analysis of the data collected in our study, the first step is to present the descriptive data provided by the survey. That way, we intend to illustrate and provide a panorama regarding the companies of our sample. We believe that a descriptive analysis is relevant to characterize the data, the values or the scores obtained for each variable. A descriptive analysis means, according to Sampieri et al. (2006), describing data and accomplishing statistical analysis in order to establish a relationship among variables.

Before proceeding with the descriptive statistics of the research, it is necessary to provide information about the companies that took part in the survey. Even though the name of the company, i.e., the name of the respondent cannot be revealed herein, it is possible to mention the region from which these Brazilian multinationals come from and the industry in which they operate. As already mentioned in the methodology, 60 Brazilian multinationals took part in the survey, but one company did not reveal the name of the company, which also prevented the identification of the industry in which this company operates. That way, the descriptive information comprehends 59 companies instead of 60.

It is easy to perceive that the State of São Paulo is the one that hosts most Brazilian companies: 32 companies, or 54.2% of the sample, are headquartered in this state. Rio Grande do Sul hosts seven companies; Santa Catarina, 6 companies; Rio de Janeiro, 5 companies; Minas Gerais, 3 companies; Paraná, 2 companies; and Bahia, Ceará, Distrito Federal and Pernambuco host one company each.

Table 29 - Federal states that host Brazilian multinationals

Source: Pinto (2017).

In terms of Brazilian regions, the Southeast is the most representative one, considering it hosts 40 companies, or 67.8% of the sample. The South region is the second most representative, with 15 companies (25.4%), followed by Northeast with three companies (5.1%) and Central West with only one company (1.7%).

Table 30 - Brazilian multinationals by region

Source: Pinto (2017).

Considering the industries in which these companies operate, it is possible to notice that most of them (10 companies, approximately 17%) are involved in the IT area; five companies are involved in the food industry (approximately 8.5%), and three companies are conglomerates (5.1%, approximately). One may notice the portfolio of industries is very diversified.

Table 31 - Industries in which Brazilian multinationals operate

Source: Pinto (2017).

In the following Sections, we will analyze the content of the study individually. First, we will start with the descriptive analysis, which includes tables of frequency and basic information about the respondents. After that, we will proceed with the multivariate analysis, which encompass canonical correlation and multiple linear regression analysis. We will end this Section by presenting and discussing each of the variables individually, as well as indicating and discussing the outcomes for the variables of the study.

5.1 Descriptive analysis

Considering there are currently 287 Brazilian multinationals operating abroad, our sample corresponds to 20.9% of this amount. Therefore, the descriptive analysis we will present herein corresponds only to the 20.9% of the companies that took part in the survey; in other words, our conclusions cannot be generalized for companies not included in the sample or for the general population.

The table below indicates the general descriptive statistics of the research, which aims to deepen the study on the behavior of Brazilian multinationals in issues related to CSR and SOI.

Table 32 - Descriptive statistics

		<i>GM</i>	<i>Regul</i>	<i>Dif</i>	<i>SOI</i>
<i>N</i>	<i>Valid</i>	60	60	60	60
	<i>Missing</i>	2	2	2	2
<i>Mean</i>		3.9500	3.9958	3.5833	4.3778
<i>Median</i>		4.0000	4.0000	3.6250	4.3333
<i>Mode</i>		4.00	5.00	3.00	5.00
<i>Standard deviation</i>		0.76856	0.75421	0.73310	0.51518

Source: Pinto (2017).

Illustration 21 already demonstrates interesting insights on the behavior of the companies that took part in the survey. The mean, or arithmetic mean, is equal to the sum of the values of a determined variable divided by the total number of observations. That way, the mean of a variable X ($\bar{X}$) is defined by the equation below.

Illustration 21 - Arithmetic mean

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{n}$$

Source: Fávero et al. (2009).

In the equation, n refers to the total number of observations; X_i , for $i = 1, \dots, n$, represents each one of the values presented by variable X . In that sense, it is possible to infer that the higher mean of the answers provided by the companies of our sample was

in the fourth construct, SOI. The lowest mean can be found in Construct 3 (3.5833). The arithmetic means presented by the constructs were, however, not very discrepant.

The median (*Md*) indicates the value that separates the higher half of a sample from the lower half; it can be considered, therefore, a central value. The equations listed below can be used to calculate the median.

Illustration 22 - Equations used to calculate the median

$$Md(X) = \frac{X_{\frac{n}{2}} + X_{(\frac{n}{2})+1}}{2}$$

$$Md(X) = X_{\frac{(n+1)}{2}}$$

Source: Fávero et al. (2009).

In both equations, n indicates the total number of observations; X_1 indicates the lower observation or the value of the first element and X_n is the higher observation or the value of the last element. The difference is that the first equation is used when n is even; the second one is used when n is odd. That way, the median observed in the first (4.0000), second (4.0000) and fourth (4.3333) constructs are higher than the one observed in the third (3.6250). Such outcome indicates interesting insights when considering that 50% are located below the median, while the 50% are located above it. It is possible to conclude, therefore, that half of the respondents chose between the items 4 or 5 in the Likert scale for Constructs 1, 2 and 4.

The mode indicates the most frequent value present in a set of observations. According to Fávero et al. (2009), the mode is the only descriptive statistics that can be calculated for both quantitative and qualitative variables. The most frequent value in Constructs 2 and 4 was 5; in Construct 1, 4; and in Construct 3, 3. It is important to point out that Construct 3 is the one that presents the lowest values in the three descriptive analyses accomplished so far. The indication that the mode for the other constructs were 4 and 5 is important for our study, considering that most companies of the sample strongly agree to statements made related to CSR and SOI.

The last descriptive analysis relates to standard deviation, which is defined by Sampieri et al. (2006) as the deviation observed regarding the arithmetic mean. Operationally, it is desirable that the standard deviation is closer to 0, which indicates there is no risk associated with the probability of a variable presenting a value different from the mean (Fávero et al., 2009). The equation of standard deviation (s) for samples is the following one.

Illustration 23 - Standard deviation equation for samples

$$s = \sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n - 1}}$$

Source: Fávero et al. (2009).

The standard deviation of Constructs 1, 2 and 3 are very similar: 0.76856, 0.75421, and 0.73310, respectively. Construct 4 is the only one that presents a standard deviation closer to 0 (0.51518), which indicates a better outcome.

As explained in the methodology, the Likert scale was chosen in our survey research, which is a set of items presented as affirmations. A Likert scale can have different formats; some may indicate a seven-level Likert item, others may indicate a three-level Likert item. For our study, we chose a five-level Likert item, which goes from strongly disagree to strongly agree.

Illustration 24 - Five-level Likert item

Source: Pinto (2017).

In order to illustrate the results of the survey, we will divide the Likert items into three categories: low relevance for items 1 and 2; irrelevant for item 3; and high relevance for items 4 and 5. That way, when we mention in the text that a company strongly agrees to a determined statement, we will be considering items 4 and 5. In the table below, x indicates the answer given by each interviewee that took part in the survey.

Table 33 - Classification of the Likert scale

<i>Likert items</i>	<i>Relevance level</i>
$1 \leq x < 3$	Low
$3 \leq x < 4$	Irrelevant
$4 \leq x \leq 5$	High

Source: Pinto (2017).

With regard to Construct 1, Guidelines for multinationals, most of the companies interviewed considered the issues approached by this construct as very relevant (56.6%); only 8.4% considered these issues irrelevant, and 35% considered them irrelevant.

Table 34 - Frequency of Construct 1

<i>Relevance level</i>	<i>Frequency</i>	<i>Valid percentage</i>
<i>Low</i>	5	8.4%
<i>Irrelevant</i>	21	35%
<i>High</i>	34	56.6%

Source: Pinto (2017).

These outcomes show that slowly Brazilian companies tend to consider the guidelines for responsible companies, since more than the half (56.6%) consider these issues highly relevant. The individual analysis of the variables of this construct indicate an interesting behavior of Brazilian multinationals; most of the interviewed companies consider matters related to training employees regarding environmental, health and safety issues the most relevant ones (85%) when compared to the other variables of the construct. With regard to the publication of social and environmental reports, 55% of the companies consider this a highly relevant subject; on the other hand, 45% consider it as low relevant or irrelevant, which can indicate that practically half of the companies do not publish such reports.

It is interesting to notice that 81.7% of the companies claim to reduce the social and environmental problems caused by their activities, which is an important issue when it comes to corporate responsibility (OECD, 2011). With regard to antifraud communication channels, 70% of the researched companies affirm this is a highly relevant matter, which is an important sign that multinational companies are involved in alleviating corruption in the countries in which they operate. It is possible to affirm, therefore, that the variables GM1, GM3 and GM4 are the most highly rated ones according to the companies of the sample.

Table 35 - Percentage of the variables of Construct 1

	<i>GM1</i>	<i>GM2</i>	<i>GM3</i>	<i>GM4</i>
<i>Low</i>	1.7%	21.6%	5%	8.3%
<i>Irrelevant</i>	16.6%	23.4%	10%	21.7%
<i>High</i>	81.7%	55%	85%	70%

Source: Pinto (2017).

When it comes to the second construct of the study, which relates to regulation, the results are even more surprising. There is no company among the ones we interviewed that considered regulation issues of little relevance; in 15% of the cases, companies considered them irrelevant; and 85% of the companies considered the variables of this construct very relevant. It indicates, possibly, that companies tend to comply with regulation, which implicates that companies may not be naturally responsible (keeping in mind that only a little above 50% consider CSR issues as relevant, according to Table 35); they act in a responsible way due to regulation (Gonçalves-Dias & Teodósio, 2009; X X).

Table 36 - Frequency of Construct 2

<i>Relevance level</i>	<i>Frequency</i>	<i>Valid percentage</i>
<i>Low</i>	0	0%
<i>Irrelevant</i>	9	15%
<i>High</i>	51	85%

Source: Pinto (2017).

When analyzing the variables of this construct individually, it is possible to see that Regul1 and Regul3 present the best results: 96.6% and 98.3% of the companies, respectively, consider the issues of compliance with local legislation and proactivity as very relevant matters. Regul2, presents satisfactory results as well, considering that 75% of the companies that took part in the survey affirm to operate in countries in which CSR is demanded. Such outcomes are in accordance with (Gonçalves-Dias, X X), in which

they emphasize the importance of regulation in CSR issues; the companies of the sample seem to acknowledge such importance.

Table 37 - Percentage of the variables of Construct 2

	<i>Regul1</i>	<i>Regul2</i>	<i>Regul3</i>
<i>Low</i>	0%	0%	0%
<i>Irrelevant</i>	3.3%	25%	1.7%
<i>High</i>	96.7%	75%	98.3%

Source: Pinto (2017).

Results are more heterogeneous when it comes to Construct 3 in comparison with Construct 2. The smallest part of the interviewed companies consider issues related to CSR as differentiation as a low relevant matter (13.3%). Most part of them, however, consider these issues irrelevant; most part of the sample agrees to such statement (50%); finally, 36.8% think that CSR as differentiation is a relevant issue for the company. It brings important inferences on CSR, because such results can indicate that most companies are not interested in the strategic aspect of CSR as differentiation.

Table 38 - Frequency of Construct 3

<i>Relevance level</i>	<i>Frequency</i>	<i>Valid percentage</i>
<i>Low</i>	8	13.2%
<i>Irrelevant</i>	30	50%
<i>High</i>	22	36.8%

Source: Pinto (2017).

The analysis of the variables separately indicate better results for variables Dif1 and Dif2, environmental and social certification and reputation of being socially and environmentally responsible, respectively. Coincidentally, the variables that present the lowest percentage rates for the item ‘highly relevant’ relate to suppliers. In that sense, one can infer that these companies are not considering the whole supply chain of their operations; they seem to be more concerned about management and employees than about suppliers, or, as indicated by Dif4, clients.

Table 39 - Percentage of the variables of Construct 3

	<i>Dif1</i>	<i>Dif2</i>	<i>Dif3</i>	<i>Dif4</i>
<i>Low</i>	10%	5%	26.7%	30%
<i>Irrelevant</i>	23.3%	20%	41.7%	28.3%
<i>High</i>	66.7%	75%	31.6%	41.6%

Source: Pinto (2017).

The last construct of the study, related to sustainability-oriented innovation, indicates results a bit closer to the ones found in Table 34 for Construct 1. Most of the companies seem to take SOI issues into consideration (58.4%); 31.6% think they are irrelevant; and only 10% think that of less relevance.

Table 40 - Frequency of Construct 4

<i>Relevance level</i>	<i>Frequency</i>	<i>Valid percentage</i>
<i>Low</i>	6	10%
<i>Irrelevant</i>	19	31.6%
<i>High</i>	35	58.4%

Source: Pinto (2017).

Individually, the analysis shows better results for variables SOI3 and SOI2, in which most respondents strongly agreed to statements related to the involvement of stakeholders in SOI initiatives (85% and 73.3%, respectively). Variable SOI1 is the one that presents a higher rate for irrelevant and low relevance (28.4% and 10%, respectively), and, therefore, 61.6% for high relevance. It is interesting to notice that Brazilian multinationals seem to be more engaged in SOI issues, considering the percentage of companies that considered SOI items highly relevant.

Table 41 - Percentage of the variables of Construct 4

	<i>SOI1</i>	<i>SOI2</i>	<i>SOI3</i>	<i>SOI4</i>
<i>Low</i>	10%	8.4%	5%	5%
<i>Irrelevant</i>	28.4%	18.3%	10%	30%
<i>High</i>	61.6%	73.3%	85%	65%

Source: Pinto (2017).

5.1.1 Synthesis of the descriptive analysis

The table below indicates the relevance of each one of the constructs of the study. That way, it is possible to infer that Brazilian multinationals consider Constructs 1, 2 and 4 as the ones which present most highly relevant variables; Construct 3 was the only one in which Brazilian multinationals considered CSR as differentiation an irrelevant matter.

Table 42 - Synthesis of the descriptive analysis

<i>Construct</i>	<i>Relevance of the construct</i>
<i>Construct 1</i> <i>Guidelines for multinationals</i>	The construct was considered highly relevant according to the Brazilian multinationals of the sample (56.6%)

<i>Construct 2</i>	The construct was considered highly relevant according to the Brazilian multinationals of the sample (85%)
<i>Regulation</i>	
<i>Construct 3</i>	The construct was considered irrelevant according to the Brazilian multinationals of the sample (50%)
<i>CSR as differentiation</i>	
<i>Construct 4</i>	The construct was considered relevant according to the Brazilian multinationals of the sample (58.4%)
<i>SOI</i>	

Source: Pinto (2017).

It is possible to conclude that the construct that was best evaluated by the Brazilian multinationals was Construct 2, which relates to regulation (85%). Such outcome can be related to Brazilian multinationals taking regulation issues more seriously when expanding into foreign markets, or to the fact that companies become responsible due to the compliance with regulation. Construct 3, related to CSR as differentiation, was the only one not considered highly relevant by the multinationals that took part in the survey; it was the only construct in which most of the respondents chose item 2. Coincidentally, Construct 3 presents the highest percentage of respondents which chose the construct of less relevance (13.2%).

Considering the variables independently, the most highly rated variable among the constructs was Regul3 (98.3%). The variable that presented the lowest relevance were variables Regul1, Regul2, and Regul3 (0%).

Table 43 - Analysis of the variables of all constructs

	<i>High</i>	<i>Low</i>
<i>GM1</i>	81.7%	1.7%
<i>GM2</i>	55%	21.6%
<i>GM3</i>	85%	5%
<i>GM4</i>	70%	8.3%
<i>Regul1</i>	96.7%	0%
<i>Regul2</i>	75%	0%
<i>Regul3</i>	98.3%	0%
<i>Dif1</i>	66.7%	10%
<i>Dif2</i>	75%	5%
<i>Dif3</i>	31.6%	26.7%

<i>Dif4</i>	41.6%	30%
<i>SOI1</i>	61.6%	10%
<i>SOI2</i>	73.3%	8.4%
<i>SOI3</i>	85%	5%
<i>SOI4</i>	65%	5%

Source: Pinto (2017).

5.2. Multivariate analysis

In this Section, we will present in details the statistical procedures used herein in order to accomplish the objectives of the study. As mentioned in the methodology, we intend to fulfil the objectives of the research by using multivariate analysis methods, which are the ones in which it is possible to analyze the relationship among several dependent variables and at least one dependent variable (Sampieri et al., 2006). In other words, multivariate analysis refers to every statistical technique that simultaneously analyzes multiple characteristics (Hair et al., 2009).

Multivariate analysis is, in fact, an extension of univariate and bivariate analysis: univariate analysis studies the behavior and distribution of an isolated variable; bivariate analysis studies associations and correlations and elaborates variance analysis related to two variables simultaneously (Fávero et al., 2009). Multivariate analysis, therefore, is used to study models in which all variables are random and interrelated in a way that their different effects cannot be interpreted separately (Ibid.).

Illustration 25 - Univariate, bivariate and multivariate analysis

Source: Fávero et al. (2009).

Therefore, we chose as multivariate approaches two different techniques: canonical correlation and multiple linear regression. The purpose of the canonical correlation is to quantify the strength of the relationship between two sets of variables, represented by dependent and independent. The multiple linear regression aims to study the relationship between two or more explicative variables. There will be further information about these techniques, as well as the results obtained from the analyses, in the next Sections.

5.2.1 Canonical correlation

As mentioned previously, canonical correlation is a statistical technique that quantifies the strength of the relationship between two sets of variables, represented by dependent and independent variables. The canonical correlation identifies the better structure of each set of variables that maximizes the relationship between dependent and independent variables, developing a linear combination for each set of variables in order to maximize the correlation between the two sets (Fávero et al., 2009). The model of canonical correlation can be expressed by the equation below.

Illustration 26 - Model of canonical correlation

$$Y_1 + Y_2 + Y_3 + \dots + Y_q = f(X_1 + X_2 + X_3 + \dots + X_p)$$

Source: Fávero et al. (2009).

In this equation, Y indicates dependent variables (also known as criterion) and X indicates independent variables (also known as predictors); q and p indicate the maximum number of variables of Y and X respectively.

Canonical correlation is also expressed by the coefficient (r), which measures not only the strength of the relationship, but also the degree of association among variables. That way, two or more variables can be considered highly correlated when changes occurring in one of them are strongly related to changes occurring in the other one (Cunha & Coelho, 2007).

When two or more variables are highly correlated, it is possible to observe the phenomenon of multicollinearity, which reduces the predictive power of any independent variable when associated with other independent variables. Hair Jr et al. (2009) define multicollinearity as the situation in which a variable can be explained by other variables in a determined analysis. As far as multicollinearity increases, it becomes more complicated to interpret the statistical variable, since it becomes more difficult to verify the effect of any variable due to strong interrelationships. That way, in order to pursue more accurate results, the researcher needs independent variables that present a low degree of multicollinearity with other independent variables, but, at the same time, a high correlation with the dependent variable (Hair Jr et al., 2009).

The coefficient (r) varies from -1 to +1; the closer to -1 or +1, the higher the degree of association; the closer to 0, the smaller the degree. When correlation reaches -1, the correlation is said to be perfectly negative correlated; in other words, variables are perfectly associated, but inversely proportional to one another. When it reaches +1, the correlation is perfectly positive correlated, which indicates that variables are directly proportional (Cunha & Coelho, 2007).

Before starting the analysis of the results of the canonical correlation, we will present the results of the multicollinearity test. It was not possible to detect the presence of multicollinearity in any of the constructs developed in the study.

Table 44 - Test for multicollinearity

	<i>Collinearity statistics</i>	
	Tolerance	VIF
<i>(Constant)</i>		
<i>SOI</i>	0.506	1.975
<i>Dif</i>	0.558	1.791
<i>Regul</i>	0.461	2.167

Source: Pinto (2017).

The table indicates two statistics: VIF (Variance Inflation Factor) and Tolerance, who are commonly used to diagnose multicollinearity problems. Fávero et al. (2009) emphasize that VIF statistics above 10 indicate serious multicollinearity problems; according to the authors, however, values above 5 can already indicate multicollinearity problems.

In the table above, we considered the construct GM as the dependent variable – and, consequently, the other constructs as independent variables – in order to observe the relationship among them. As one can see, all VIF statistics are below 5, which indicates the absence of multicollinearity issues. In the ascending order, Construct Dif presents the lower rate of VIF (1.791), followed by SOI (1.975) and Regul (2.167). Considering that multicollinearity is not a problem in our study, which was one of the requirements of this statistical technique, we will proceed the analysis by presenting the results of the canonical regression.

Table 45 - Canonical correlation analysis

		<i>SOI</i>	<i>GM</i>	<i>Dif</i>	<i>Regul</i>
<i>SOI</i>	Pearson correlation	1	0.707**	0.581**	0.673**
	Sig.		0.000	0.000	0.000
	N	60	60	60	60
<i>GM</i>	Pearson correlation	0.707**	1	0.727**	0.738**
	Sig.	0.000		0.000	0.000
	N	60	60	60	60
<i>Dif</i>	Pearson correlation	0.581**	0.727**	1	0.630**
	Sig.	0.000	0.000		0.000
	N	60	60	60	60
<i>Regul</i>	Pearson Correlation	0.673**	0.738**	0.630**	1
	Sig.	0.000	0.000	0.000	
	N	60	60	60	60

Source: Pinto (2017).

The correlation analysis indicates a positive relationship among several constructs. All coefficients (r) are represented with two asterisks, which implicates that the relationship between the independent variables are significant. Such relationship is considered significant when above 0.05; when the significance of the model (represented by *Sig.*) equals 0.000, it means that the canonical functions are relevant, which is a positive and expected result for the model.

When analyzing the relationship between the constructs related to CSR per se, one can come to interesting conclusions. The correlation between GM and Dif, for instance, is relevant (0.727) and indicates that companies more likely to adopt the guidelines for multinationals in their management are more likely to see CSR as differentiation, which could provide them with a competitive advantage.

The correlation between GM and Regul is even higher than in the example above mentioned ($0.738 > 0.727$). Such stronger correlation indicates that companies that adopt the guidelines for multinationals are also the ones that tend to comply with local regulations, while being proactive regarding this compliance and operating in countries

in which CSR is demanded. On the other hand, the correlation between Dif and Regul is the lowest among CSR constructs (0.630); it is, however, still a significant correlation. It indicates that the more a company complies with regulation, the more it tends to see CSR as a differentiation strategy.

When analyzing the correlation between CSR constructs and SOI, it is possible to draw relevant conclusions. The relationship between GM and SOI, for instance, is significant (0.707) and indicates there is a positive relationship between these two sets of variables. That way, it is possible to infer that companies that are more in accordance with the guidelines for multinationals tend to be the ones more prone to relate to SOI.

The correlation between SOI and Dif is also relevant (0.581), but it is the one that presents the lowest rates in the canonic correlation. Such relationship implicates that the Brazilian companies that are likely to adopt SOI in their management are also likely to consider CSR issues as a differentiation strategy. Such outcome can be related to the fact that SOI already has a strategic characteristic, since companies tend to add social and environmental values into the creation of innovation in order to achieve a competitive advantage, while alleviating social and environmental problems.

At last, the correlation between SOI and Regul presents a significant correlation as well (0.673). Such outcome could bring up an interesting insight for the academic literature regarding SOI and CSR, because we did not find anything in the literature relating these two aspects.

It is important to remember that the canonical correlation considers the variables, or, in our case, the constructs, separately. In order to analyze the relationship among all variables at the same time, it is necessary to apply the technique of multiple linear regression, in which the constructs are evaluated concomitantly.

5.2.2 Multiple linear regression

Multiple regression analysis is the study of how a dependent variable (y) is related to two or more independent variables. The equation that describes how the dependent variable is related to independent variables ($x_1, x_2, \dots, x_p$ – where p indicates the number

of dependent variables) and to statistical error is known as model of multiple regression (Sweeney, Williams & Anderson, 2013).

Illustration 27 - Model of multiple regression

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_p x_p + \epsilon$$

Source: Sweeney, Williams and Anderson (2013).

The equation that describes how the average value of y is related to $x_1, x_2, \dots, x_p$ is known as equation of multiple regression (Ibid.)

Illustration 28 - Equation of multiple regression

$$E(y) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_p x_p$$

Source: Sweeney, Williams and Anderson (2013).

That way, the method of multiple linear regression, which is a type of general linear regression modeling, implies in the use of two or more independent variables through a multivariate statistical technique in the provision of a dependent variable. It is possible to affirm that the regression analysis is a simple and direct dependence technique which provides prediction and explanation of a determined phenomenon: prediction demonstrates how much an independent statistical variable can predict the dependent variable; explanation examines the regression coefficients for each independent variable, in order to explain the effects of independent variables (Hair Jr et al., 2009).

The coefficient used in regression analysis is R^2 , which is, in fact, the squared correlation coefficient. Such coefficient is used when the researcher wants to compare

several regression equations, involving values of different independent variables. The value expressed by R^2 is very useful because it considers the specificities of the model (Cunha & Coelho, 2007). Even if it is possible to determine the association between one independent variable and a dependent variable through coefficient R^2 , the extent of the predictive power is many times determined by its multicollinearity with other variables (Hair et al., 2009).

Such as in the canonical correlation, regression models use the diagnosis of multicollinearity by using VIF statistics and tolerance. The purpose of tolerance is to indicate the proportion of the variation of an explicative variable that does not depend on the other explicative variables: when tolerance is low, the explicative variable shares a high percentage of its variance with the other explicative variables. VIF statistics indicate how much the variance of each regression coefficient increases due to multicollinearity (Fávero et al., 2009). We will not demonstrate a table that indicates the absence of multicollinearity among the variables because we already accomplished that in Table 44.

There are, however, other important matters in multiple linear regression analysis: significance and the F-test, which are present in every regression analysis. F-test is calculated in order to test the hypothesis that the amount of the variation explained by the regression model is higher than the reference prevision; in other words, R^2 has to be significantly higher than zero (Hair Jr et al., 2009). The statistical significance of regression coefficients indicate that the coefficients of a large number of cases have to be different from zero. When a confidence interval is established for the estimated coefficient and if it does not include zero, then the difference between the coefficient and zero is statistically insignificant. Therefore, it is necessary to establish a significance level (alpha): usually, the value 0.05 is used (Ibid.); in other words, the significance has to be lower than 0.05; when the significance is smaller than 0.10, it is considered marginal.

It is important to point out that all explicative (e.g. independent) variables were included in the model, even the ones that could not be considered significant. The model summary of the multiple regression analysis is necessary to identify how much the set of independent variables can explain the variance of the dependent variable. In our case, how much GM, Regul, and Dif can explain the variance observed in SOI. The model summary also indicates the Durbin-Watson statistics, which is also used to indicate problems with multicollinearity.

Table 46 - Model summary

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
<i>1</i>	0.743	0.553	0.529	0.52765	1.736

Source: Pinto (2017).

The statistics Durbin-Watson presents a value lower than 2 (1.736), which already indicates the absence of multicollinearity. The table indicates that the independent constructs explain 55.3% (R square) of the variance of the dependent variable. In practical terms, it is possible to consider that GM, Regul, and Dif explain 55.3% of the variance perceived in SOI. This is a very satisfactory result for an exploratory study like ours. The value expressed by R^2 is not higher because there may be are other relevant variables that influence the behavior of SOI.

The ANOVA analysis, which is generated in the procedure of multiple regression analysis, shows if the model presents statistical significance; in other words, ANOVA analysis indicates if at least one of the independent variables is significant to explain the behavior of the dependent variable (Fávero et al., 2009).

Table 47 - ANOVA^a

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>1</i>	Regression	19.259	3	6.420	23.058	0.000 ^b
	Residual	15.591	56	0.278		
	Total	34.850	59			

^a. *Dependent Variable: GM*

^b. *Predictors: (Constant): Regul, Dif, SOI*

Source: Pinto (2017).

The ANOVA analysis shows two important statistics: F-test and Sig. According to propositions indicated by Hair Jr et al. (2009), a regression analysis is relevant when the F-statistics present a number considerably higher than 0 and when the significance (Sig.) is ideally lower than 0.05. Both premises of the statistical technique have been met: the F statistics reached the score of 23.058; and the significance is 0.000. In other words, the results presented by the multiple linear regression analysis are pertinent and significant.

Table 48 - Coefficients of the multiple linear regression

<i>Model</i>		<i>Unstandardized</i>		<i>Standardized</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
<i>1</i>	(Constant)	-0.103	0.596		-0.173	0.863
	GM	0.424	0.156	0.416	2.716	0.009
	Regul	0.470	0.202	0.315	2.330	0.023
	Dif	0.084	0.139	0.080	0.606	0.547

Source: Pinto (2017).

It is also possible to notice through the information provided by Table 48 that not all independent variables present Sig. < 0.05. When independent variables present Sig. > 0.05, they should be excluded from the model in order to improve the provision of the regression analysis. Independent variables that present Sig. > 0.05 are the ones that usually present smaller values for tolerance. In our case, even though Construct Differentiation presents a Sig. higher than expected, this variable will be kept in the model, since we believe that this brings important insights for our study.

The coefficients provided by Table 48 indicate direct implications for some of the hypotheses of the study. They will be analyzed with further detail in the next Section.

5.3 Hypotheses

We will provide in this section implications for the hypotheses, e.g. if there is empirical support as result of the multivariate analysis to reinforce their relevance in the academic and managerial spheres. Even though the coefficients provided by the multiple linear regression are important for the empirical support of some hypotheses, the procedure of canonical correlation was also responsible for providing empirical support for other hypotheses.

The canonical correlation indicates the strength of the relationship between two variables individually, while the multiple linear regression studies the relationship between one dependent variable and other independent variables simultaneously. On the one hand, considering that Hypothesis 1, 2 and 3 involve the direct measurement between variables individually, the results provided by the canonical correlation were sufficient to give support for these hypotheses. On the other hand, Hypothesis 4, 5, and 6 involve the relationship among independent variables simultaneously, which demands for the outcomes from the regression analysis.

5.3.1 Hypothesis 1

As stated in Section III, one of the purposes of this study was to analyze the relationship among CSR variables. We considered important to analyze the relationship between the guidelines for multinationals, which is a construct developed herein based on assumptions and implications accomplished by OECD (2011), Gonçalves-Dias and Teodósio (2011), Bertonecello and Chang Jr (2007), Griffiths and Wall (2012), Lassere (2012), Ako (2013), and Rathert (2016), and other variables related to CSR.

The first relationship we wanted to approach was the correlation between Construct 1, Guidelines for Multinationals, and Construct 2, Regulation. Therefore, Hypothesis 1 was created.

H1: The more Brazilian multinationals follow the guidelines for multinationals, the more they comply with CSR regulations.

As explained in Section 4, the canonical correlation analysis demonstrates the interaction between two variables individually, or between two constructs. Therefore, the results provided by the canonical correlation are sufficient to provide information to support this hypothesis or not.

According to the results presented by the statistical analysis in Table 45, the correlation between these two constructs is relevant (0.738). That way, it is possible to infer that changes occurring in one variable can implicate in changes occurring in the other one. In other words, the more Brazilian multinationals follow the guidelines for multinationals, they more likely they are to comply with CSR regulations.

5.3.2 Hypothesis 2

As in Hypothesis 1, the second hypothesis of the study could be proved by the results of the canonical correlation. In this case, the purpose was to analyze the correlation between Construct 1, Guidelines for Multinationals, and Construct 3, Differentiation.

H2: The more Brazilian multinationals follow the guidelines for multinationals, the more they consider CSR as a differentiation strategy.

The purpose of this hypothesis was to make an assumption about the possible correlation between the guidelines for multinationals and the variables that indicate CSR as differentiation. The results provided by the canonical correlation analysis (0.727) indicate a positive correlation between these two constructs. That way, one can conclude that Brazilian multinationals that follow the guidelines proposed herein are more likely to consider CSR as a differentiation strategy.

5.3.3 Hypothesis 3

The third hypothesis is the last one that could be confirmed through the procedure of canonical correlation. Due to the relevance given to the compliance with regulation and the acknowledgement that CSR can be a differentiation strategy that provides the company with a competitive advantage (Boehe & Cruz, 2010; Pinto, Oliveira Jr & Borini, 2013), Hypothesis 3 was developed.

H3: The more Brazilian multinationals comply with CSR regulations, the more they consider CSR as a differentiation strategy.

The coefficient provided by the canonical correlation was considered relevant (0.630), which indicates that Hypothesis 3 had empirical support. It is, therefore, possible to assume that Brazilian multinationals that comply with CSR regulations are more likely to consider CSR as a differentiation strategy. It is important to point out that many scholars (Campbell, 2007; Porter & Linde, 1995; Carroll & Shabana, 2010) indicate that the compliance with regulations can also provide the company with a competitive advantage, considering that proactive companies and companies that follow regulations are ahead of competitors and more prepared to deal with adversities.

5.3.4 Hypothesis 4

For the analysis of the following hypothesis, the use of the results of the canonical correlation were not used. The canonical correlation indicates the interaction, e.g. the relationship, between two variables when analyzed separately. Our purpose was, however, to analyze the relationship between independent variables concomitantly; therefore, the use of multiple linear regression was necessary.

The first relationship we wanted to analyze was the influence that Construct 1, Guidelines for Multinationals, had over the dependent variable, SOI, when analyzed with the other independent variables.

H4: The more Brazilian multinationals develop SOI, the more they follow the guidelines for multinationals.

The coefficient provided by the multiple linear regression was significant (0.009), which indicates a positive relationship between SOI and GM. That way, it is possible to affirm that these variables are directly and proportionally related. This outcome indicates that the company might not develop SOI in an isolated way; the company involved in sustainability-oriented innovation is also involved with the guidelines for multinationals, which indicate several issues related to CSR (e.g. alleviation of the impacts of activities and investment in antifraud channels).

5.3.5 Hypothesis 5

The result provided by the multiple linear regression indicate a positive relationship between SOI and Regulation ($0.023 < 0.05$). It is possible to affirm, therefore, that Brazilian multinationals involved in SOI issues are more likely to comply with CSR regulations.

H5: The higher the development of SOI by Brazilian multinationals, the higher the compliance with CSR regulations.

Such outcome may be related to what Porter & Linde (1995) proposed when addressing the issue of innovation and environmental concern: innovation is vital and environmental concern is necessary to emphasize competitive advantages. That way,

companies involved in SOI are more likely to acknowledge the competitive aspect of regulations.

5.3.6 Hypothesis 6

The last hypothesis of the study tried to relate the variables SOI and Differentiation. Unlike the other variables analyzed in the multiple linear regression analysis, this correlation was the only one not considered significant ($0.547 > 0.05$).

H6: The more Brazilian multinationals develop SOI, the more they tend to consider CSR as a differentiation strategy.

The absence of empirical support for such variable also brings important insights for the study. The first implication is the possibility that Differentiation is not the most proper variable to explain or to influence the behavior of SOI. As noticed in the descriptive analysis of the study, variables related to suppliers were not very well rated by respondents, which might have had implications in this specific regression analysis.

5.3.6 Synthesis

Most of the hypotheses we wanted to test had empirical support; only one, related to SOI and Differentiation, could not be empirically supported. It is, however, possible to provide a ranking to indicate which set of variables can be considered the most relevant ones. For the first three hypotheses, in which the procedure of canonical correlation was used, the most significant relationship was between GM and Regulation (0.738), followed by GM and Differentiation (0.630), and, finally, Regulation and Differentiation (0.630).

For the other hypotheses, in which the procedure of multiple linear regression was applied, the ranking would be, in descending order: SOI and GM (0.009) and SOI and Regulation (0.023). The relationship between SOI and Differentiation was considered insignificant ($0.547 > 0.05$). The table below indicates the synthesis of the results for the hypotheses.

Table 49 - Results for hypotheses

<i>Hypothesis</i>	<i>Result</i>
<i>Hypothesis 1</i>	Empirical support provided
<i>Hypothesis 2</i>	Empirical support provided
<i>Hypothesis 3</i>	Empirical support provided
<i>Hypothesis 4</i>	Empirical support provided
<i>Hypothesis 5</i>	Empirical support provided
<i>Hypothesis 6</i>	No empirical support provided

Source: Pinto (2017).

CONCLUSION

6. Conclusion

Our purpose in this research was to provide a study that could analyze the behavior of Brazilian multinationals in relation to corporate social responsibility. The literature review, i.e. theoretical framework, developed herein provided the necessary support to achieve the objectives of the research, to create hypothesis, to conduct a survey, and to analyze the results.

In terms of achieving the objectives we proposed in the initial part of the study, it is possible to affirm we accomplished our goals. The general objective of the study was to analyze the presence of CSR in Brazilian multinationals, which was carried out herein. The descriptive statistics provided by our analysis indicate positive results in terms of CSR; when considering the mean of the constructs that indicate the answers of the interviewees in the Likert-scale, relevant figures can be observed. As Table 32 indicates, the mode for Guidelines for multinationals was 4; the mode for Regulation was 5; for CSR as differentiation, 3. Considering the mode indicates the result that repeats more frequently, the results can be considered very satisfactory – keeping in mind that in the Likert-scale, the item 5 indicates more consistency of results.

This outcome itself is already a good indicator for Brazilian multinationals. As it has been pointed out by Steiner and Steiner (2000), in Latin America there is no natural sense of responsibility and, in that case, foreign multinationals from developed countries are the ones that have to take care of sustainability, e.g. CSR, issues. The outcomes provided by our study already proves such statement wrong. Besides, it is important to remember that Brazilian multinationals are latecomers in terms of internationalization (Pattnaik & Kumar, 2014; Cyrino & Tanure, 2009; Fleury & Fleury, 2007) and also in terms of CSR – in accordance with Casanova and Dumas (2010), it was only in the end of the 1990s that multilatinas started to engage in CSR issues.

The descriptive analysis also indicates interesting results for Brazilian multinationals. Most companies of the sample are headquartered in the State of São Paulo; and, in terms of regions, most of the headquarters are located in the Southeast region. The

difference between companies headquartered in São Paulo and in the Southeast region is very discrepant from the other regions and states. There was, for instance, no multinational company headquartered in any of the Northern States of Brazil. Such outcome indicates a concentration in the localization of these companies, which prefer to be located in more populous regions and closer to industrial areas.

When analyzing the industries in which these companies operate, one may see a variety of segments: IT, food, aeronautics, cosmetics, energy, footwear, banking, communication, health, among others. It is interesting to notice, however, that the most relevant segment, i.e. the one in which most multinationals of the sample operate, is IT. Considering that Brazil was treated as a purely agricultural country (Cyrino & Tanure, 2009) some decades ago, this result indicates a turnaround. Such result is in accordance with Table 2.13, which indicates the segments in which Brazilian multinationals operate. One cannot claim, however, that Brazilian multinationals are not involved in segments involved with natural resources, e.g. mining, rubber, and cement, but such outcome can indicate a shift in the profile of Brazilian companies that internationalize.

The specific objectives of the research were also accomplished. Through the multivariate analysis procedures it was possible to explore the relationship between CSR and SOI in a broader sense. Singly, the relationship between GM and SOI, for instance, is significant, which implicates that companies that are more in accordance with the guidelines for multinationals are also the ones that tend to adopt SOI. When analyzing the relationship between SOI and CSR as differentiation, one can observe that companies that adopt SOI are more likely to consider CSR as a differentiation strategy. The positive correlation between SOI and Regulation implicates that companies involved with SOI are more likely to comply with the regulation.

These outcomes were very relevant for the research and indicate the fulfilment of all objectives proposed herein. Besides developing objectives, we also proposed to test some hypotheses that related CSR and SOI. The first three hypotheses are not related to SOI; they implicate a possible relationship among CSR constructs (GM, Differentiation and Regulation). That way, the first hypothesis predicted a positive correlation between GM and Regulation. The correlation between these two constructs was relevant, which indicates that the more Brazilian multinationals follow the guidelines for multinationals, the more they tend to comply with CSR regulations.

The second hypothesis indicated a positive correlation between GM and CSR as differentiation. Such correlation was also significant, which provides empirical support for this hypothesis. That way, it is possible to affirm that Brazilian multinationals that follow the guidelines for multinationals are more likely to consider CSR as a differentiation strategy. There was also empirical support to validate the third hypothesis, which predicted a positive correlation between Regulation and CSR as differentiation. One can assume, therefore, that Brazilian multinationals that comply with CSR regulations are more likely to consider CSR as a differentiation strategy.

Hypothesis 4, unlike the ones above mentioned, investigates the relationship between CSR constructs and SOI. That way, the fourth hypothesis establishes a positive correlation between SOI and GM. The coefficient provided by the multiple linear regression was significant in such correlation, which provides empirical support for this hypothesis. It is possible to affirm, therefore, that a company involved with SOI is also involved with the guidelines for multinationals.

The fifth hypothesis indicates a positive correlation between SOI and Regulation; such correlation was considered significant, which indicates that companies that adopt SOI are more likely to comply with regulation. The sixth and last hypothesis was the only that found no empirical support; that way, it is not possible to state that Brazilian multinationals that develop SOI consider CSR as a differentiation strategy. Such outcome indicates that the variables that constitute the construct CSR as differentiation may not be the best ones to explain and/or correlate to the behavior of SOI.

Illustration 29 - Hypotheses with empirical support vs. hypothesis with no empirical support

Source: Pinto (2017)

It is important to remember, however, that the construct CSR as differentiation was constituted by four variables; two of them related to suppliers (certified suppliers and training activities with suppliers and clients). These two variables received the worst evaluations from the companies that took part in the survey. Even though the last hypothesis found no empirical support, such outcome brings relevant insights for the research. The lack of interest in certified suppliers can indicate an opportunity for companies to explore such niche; Brazilian multinationals could differentiate by establishing work contracts with certified suppliers only – in order to ensure responsible inputs and fair work conditions, for instance – and by accomplishing training activities with them.

As variables related to suppliers received the worst evaluations, the three variables of construct Regulation received the best evaluations. Such outcome indicates that companies may be starting to see compliance as an opportunity instead of unnecessary costs (Nidumolu, Prahalad, & Rangaswami, 2009; Campbell, 2007).

The analyses and results presented in this study are relevant for both managerial and academic spheres. It is important to demonstrate the relevance of CSR and SOI issues in Brazilian multinationals, considering that most studies on CSR are usually based on developed country companies (Welford, 2010). The results regarding CSR can be seen as

an opportunity for managers that want to explore CSR and SOI in order to seek the strategic advantages they can provide.

6.1 Limitations and suggestions for future studies

Our study, just like most academic researches, presents some limitations. The first one refers to the sort of sample we approached herein: the results provided by non-probabilistic samples cannot be generalized. Considering there are less than 300 multinational companies in Brazil, we suggest for future studies to increase the sample in order to come closer to the population.

An increase in the sample could entail a larger number of variables to be analyzed, without the need to group them into constructs. Analyzing the relationship and correlation among several variables simultaneously could bring interesting insights for the research and for the behavior of multinationals in terms of CSR.

Future studies could also try to approach the companies that took part in our survey in order to understand why most of them disregard issues related to suppliers when it comes to CSR. That way, it would be possible to identify if suppliers are not certified or if they are not willing to take part in training programs.

One limitation of surveys that are conducted through online questionnaires is that there is no guarantee that i) the information provided is true and ii) that the employee in charge of international businesses – as it was in our case – is the one about to answer the survey. That way, in order to avoid such limitation related to surveys, future studies could try to conduct interviews personally and to focus on one or two case studies in order to illustrate initiatives related to CSR.

REFERENCES⁶

Abdala, E. C., & Oliveira, M. T. T. (2009). Estratégia e responsabilidade socioambiental: uma análise de conteúdo em instituições financeiras brasileiras. Paper presented at the *XII Semead*. São Paulo, SP. Available at <http://sistema.semead.com.br/12semead/resultado/trabalhosPDF/783.pdf>.

Abramovay, R. (2007, October 6). Ambientalismo empresarial. *Le Monde Diplomatique* Brasil, p.21. Available at <http://webserver.diplomatique.org.br/artigo.php?id=34>.

Abramovay, R. (2008, September 19). A dimensão estratégica da responsabilidade socioambiental. *Valor Econômico*, p.A13.

Ako, R. (2014). Corporate social responsibility of multinational corporations in developing countries: perspectives on anti-corruption. 30 (78). *Utrecht Journal of International and European Law*, 30 (78).

Aligleri, L., Aligleri, L. A., & Kruglianskas, I. (2009). *Gestão socioambiental: responsabilidade e sustentabilidade do negócio*. São Paulo, SP: Atlas.

Almeida Jr, A. R., & Gomes, H. L. R. M (2012). Gestão ambiental e interesses corporativos: imagem ambiental ou novas relações com o ambiente? *Ambientalismo social*, 15(1), 157-177.

Amaeshi, K., & Amao, O. O. (2009). Corporate social responsibility in transnational spaces: exploring influences of varieties of capitalism on expressions of corporate codes of conduct in Nigeria. *Journal of Business Ethics*, 86(225), 225-239.

America economía. (2016). *Ranking multilatinas 2016*. [ONLINE] Available at <http://rankings.americaeconomia.com/2016/multilatinas/ranking>. [Accessed 11 November 2016].

⁶ According to the American Psychological Association (APA).

Auger, P., Devinney, T. M., Louviere, J. J., & Burke, P. F. (2010). The importance of social product attributes in consumer purchasing decisions: a multi-country comparative study. *International Business Review*, 19(2), 140-159.

Babbie, E. (2001). *Métodos de pesquisa de survey*. Belo Horizonte, MG: Editora UFMG.

Barbieri, J.C. (2007). *Gestão empresarial ambiental: conceitos, modelos e instrumentos* (2nd ed.) São Paulo, SP: Saraiva.

Bartlett, C. A. (2006, January). Philips versus Matsushita: a new century, a new round. *Harvard Business Review*, 1-20.

Bartlett, C. A., Doz, Y., & Hedlund, G. (1990). *Managing the global firm*. London, UK: Routledge.

Bartlett, C. A., & Ghoshal, S. (1992). *Gerenciando empresas no exterior: a solução transnacional*. São Paulo, SP: Makron Books.

Bartlett, C. A., & Ghoshal, S. (1998). *Transnational Management*. Boston, MA: McGrawhill.

Beckham, T., Colwell, A., & Cunningham, P. H. (2009). The emergence of corporate social responsibility in Chile: the importance of authenticity and social networks. *Journal of Business Ethics*, 86(191), 191-206.

Bennett, S. J., Freierman, R., & George, S. (1993). *Corporate realities & environmental truths: strategies for leading your business in the environmental era*. Nova York, NY: John Wiley & Sons.

Bertoncello, S. L. T., & Chang Jr, J. (2007). A importância da Responsabilidade Social Corporativa como fator de diferenciação. *FACOM*, (17), 70-76.

Birkinshaw, J., Hood, N., & Jonsson, S. (1998). Building firm-specific advantages multinational corporations: the role of subsidiary initiative. *Strategic Management Journal*, 19(3), 221-241.

Boehe, D. M., & Cruz, L. B. (2010). Corporate social responsibility, product differentiation strategy and export performance. *Journal of Business Ethics*, 91(2), 325-346.

Boons, F., Montalvo, C., Quist, J., & Wagner, M. (2013). Sustainable innovation, business models and economic performance: an overview. *Journal of Cleaner Production*, 45, 1-8.

Borini, F. M. (2005). A responsabilidade social das corporações multinacionais estrangeiras no Brasil. Paper presented at the VII Semead. São Paulo, SP. Available at http://sistema.semead.com.br/7semead/paginas/artigos%20recebidos/Socioambiental/S A26_responsab_social_corporacoes_multinaciona.PDF.

Borini, F. M., Fleury, M. T. L., Fleury, A. C. C., & Oliveira Jr, M. M. (2010). Performance e internacionalização das empresas brasileiras. In M. M. Oliveira Jr (Org.), *Multinacionais brasileiras: internacionalização, inovação e estratégia global* (pp. 111-126). Porto Alegre, RS: Bookman.

Borini, F. M., Oliveira Jr, M.M., & Chueke, G. V. (2011). Responsabilidade Social Corporativa: como as matrizes de países desenvolvidos podem aprender com suas subsidiárias localizadas em países periféricos? Paper presented at the *Seminário de Pesquisa TRANSFORMARE – Centro Franco-Brasileiro de Pesquisas Avançadas sobre Organizações, Inovação e Sustentabilidade*. São Paulo, SP.

Bossle, M. B., Barcellos, M. D., Vieira, L. M.; & Sauvée, L. (2016). The drivers for adoption of eco-innovation. *Journal of Cleaner Production*, 113, 861-872.

Bourscheit, A. (2009, December). Sustentabilidade. *Valor Econômico Especial*, p. 67-70.

Bresman, H., Birkinshaw, J., & Nobel, R. (1999). Knowledge transfer in international acquisitions. *Journal of International Business Studies*, 30(3), 439-462.

Bursztyn, M., & Bursztyn, M. A. (2012). *Fundamentos de política e gestão ambiental: os caminhos do desenvolvimento sustentável*. Rio de Janeiro, RJ: Garamond.

Campbell, J. L. (2007). Why would corporations behave in socially responsible ways: an institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946-967.

Campbell, J. T., Eden, L., & Miller, S. R. (2012). Multinationals and corporate social responsibility in host countries: does distance matter? *Journal of International Business Studies*, 43(1), 84-106.

Carroll, A.B. (1999). Corporate social responsibility: evolution of a definitional construct. *Business & Society*, 38(3), 268-295.

Carroll, A., & Buchholtz, A. (2009). *Business & Society: ethics and stakeholder management* (7th ed.) Thomson Learning, South-Western College Publishing.

Carroll, A.B., & Shabana, K. M. (2010). The business case for corporate social responsibility: a review of concepts, research and practice. *International Journal of Management Reviews*, 12(1), 85-105

Casanova, L. (2015a). Global Latinas in search of a second wind. *Latin Trade*, 23(1), 50-50.

Casanova, L. (2015b). To go or not to go: the internationalization imperative for Global Latinas. *Latin Trade*, 23(2), 56-56.

Casanova, L. (2015c). Global Latinas: part of the solution to Latin America's social issues. *Latin Trade*, 23(3), 43-43.

Casanova, L. (2015d). Making the Brazil dream a reality. *Latin trade*, 23(4), 50-51.

Casanova, L., & Dumas, A. (2010). Corporate social responsibility and Latin American multinationals: is poverty a business issue? *Universia Business Review*, (25), 132-145.

Casanova, L., & Fraser, M. (2009a). Introduction. In *From multilatinas to global Latinas: the new Latin American multinationals* (pp. 1-29). IDB Publications (Books).

Casanova, L., & Fraser, M. (2009b). Conclusion. In *From multilatinas to global Latinas: the new Latin American multinationals* (pp. 1-29). IDB Publications (Books).

Chen, P.H., Ong, C. F., & Hsu, S. C. (2016). Understanding the relationship between environmental management practices and financial performances of multinational construction firms. *Journal of Cleaner Production* 139, 750-760.

Christensen, C. M. (1997). *The innovator's dilemma*: when new technologies cause great firms to fail. Boston, MA: Harvard Business School Press.

Cochran, P. L. (2007). The evolution of corporate social responsibility. *Business Horizons* 50, 449-454.

Cuervo-Cazurra, A., & Ramamurti, R. (2015, March 16). The escape motivation of emerging market multinational enterprises. *Columbia FDI Perspectives*, 143.

Coelho, D. B. (2014). Empresas e governo no contexto da economia global: o papel do governo brasileiro na internacionalização das empresas brasileiras de bens de capital mecânicos. (Tese de doutorado, Departamento de Administração, Universidade de São Paulo). Available at www.teses.usp.br.

Cunha, J. V. A., & Coelho, A. C. (2007). Regressão linear múltipla. In L. J. Corrar, E. Paulo, & J. M. Dias Filho (Coords.). *Análise multivariada: para os cursos de administração, ciências contábeis e economia* (pp. 131-231). São Paulo, SP: Atlas.

Cyrino, A. B., Oliveira Jr, M. M., & Barcellos, E. P. (2010). Evidências sobre a internacionalização de empresas brasileiras. In M. M. Oliveira Jr (Org.). *Multinacionais brasileiras: internacionalização, inovação e estratégia global* (pp. 93-109). Porto Alegre, RS: Bookman.

Cyrino, A. B., & Tanure, B. (2009). Trajetórias das multinacionais brasileiras: lidando com obstáculos, desafios e oportunidades no processo de internacionalização. In J. Ramsey, & A. Almeida (Orgs.). *A ascensão das multinacionais brasileiras: o grande salto de pesos-pesados regionais a verdadeiras multinacionais* (pp.v-vi). Rio de Janeiro, RJ: Elsevier.

Dobers, P. (2010). The many faces of corporate social responsibility. In P. Dobers (Ed.). *Corporate social responsibility: challenges and practices* (pp. 7-18). Stockholm: Santérus Academic Press Sweden.

Drucker, P. F. (1969). *Uma era de descontinuidade*. São Paulo, SP: Círculo do Livro.

Esteves, K., Feldmann, R. P. (2016). Why Brazil doesn't innovate: a comparison among nations. *Revista de Administração e Inovação*, 13(1), 29-38.

Esty, D. C., & Winston, A. S. (2009). *Green to gold: how smart companies use environmental strategy to innovate, create value, and build competitive advantage*. Hoboken: John Wiley & Sons.

Eweje, G. (2009). Labour relations and ethical dilemmas of extractive MNEs in Nigeria, South Africa and Zambia: 1950-2000. *Journal of Business Ethics*, 86(2), 207-223.

Fávero, L. P., Belfiore, P., Silva, F. L., & Chan, B. L. (2009). *Análise de dados: modelagem multivariada para tomada de decisões*. Rio de Janeiro, RJ: Elsevier.

FDC. (2010). Ranking FDC das multinacionais brasileiras 2010. [ONLINE] Available at <http://acervo.ci.fdc.org.br/AcervoDigital/Relat%C3%B3rios%20de%20Pesquisa/Relat%C3%B3rios%20de%20pesquisa%202010/Relat%C3%B3rio%20Ranking%202010%20-%20Portugu%C3%AAs.pdf>. [Accessed 11 October 2016].

FDC. (2016). Ranking FDC das multinacionais brasileiras 2016. [ONLINE] Available at http://www.fdc.org.br/professoresepesquisa/nucleos/Documents/negocios_internacionais/2016/Ranking_FDC_Multinacionais_Brasileiras_2016.pdf. [Accessed 13 January 2017].

FEDATO, M. C. L. (2005) . *Responsabilidade Social Corporativa: benefício social ou vantagem competitiva?* (Dissertação de mestrado, Departamento de Administração, Universidade de São Paulo). Available at www.teses.usp.br.

Fifka, M. S., & Frangen-Zeitingner, A. (2015). Multinational corporations in developing countries: bringers of working standards or modern slaveholders. P.143-158. In S. O. Idowu, C. S. Frederiksen, A. Y. Mermoud, & M. E. J. Nielsen (Eds.). *Corporate social responsibility and governance: theory and practice* (pp. 143-158). Springer.

Fleury, F., Fleury, M. T. L. (2014). Brazilian Companies in their habitat: the impacts of pro-market reforms in their evolution and internationalization. In C. Pattnaik, & V. Kumar (Eds.). *Emerging Market Firms in the Global Economy* (pp. 207-229), 15.

Available at <http://www.emeraldinsight.com/doi/pdfplus/10.1108/S1569-376720140000015009>.

Fleury, A., & Fleury, M.T.L. (2009). A evolução dos sistemas de produção globais e o surgimento das EMNs brasileiras. In J. Ramsey, & A. Almeida (Orgs.). *A ascensão das multinacionais brasileiras: o grande salto de pesos-pesados regionais a verdadeiras multinacionais* (pp. 39-64). Rio de Janeiro, RJ: Elsevier.

Fleury, A., & Fleury, M. T. L. Internacionalização de empresas brasileiras: em busca de uma abordagem teórica para os late movers. In: A. Fleury, & M. T. L. Fleury (Orgs.). *Internacionalização e os países emergentes*. São Paulo, SP: Atlas, 2007.

Fleury, A., & Fleury, M.T.L. (2012). *Multinacionais brasileiras: competências para internacionalização*. Rio de Janeiro, RJ: Editora FGV.

Forbes. (2016a). *The world's most sustainable companies 2016*. [ONLINE] Available at <http://www.forbes.com/sites/kathryndill/2016/01/22/the-worlds-most-sustainable-companies-2016/#16491ac0965f>. [Accessed 22 November 2016].

Forbes. (2016b). *Forbes global 2000 companies per country*. [ONLINE] Available at <http://blogs-images.forbes.com/steveschaefer/files/2016/05/global-2000.jpg>. [Accessed 20 November 2016].

Franceschini, S., Faria, L. G. D., & Jurowetzki, R. (2016). Unveiling scientific communities about sustainability and innovation: a bibliometric journey around sustainable terms. *Journal of Cleaner Production* 127, 72-83.

Freitas, H., Oliveira, M, Saccol, A. Z., & Moscarola, J. (2000). O método de pesquisa survey. *Revista de Administração*, 35(3), 105-112.

Friedman, M. (1970, September 13). The social responsibility of business is to increase its profits. *The New York Times Magazine*. [ONLINE] Available at <http://www.colorado.edu/studentgroups/libertarians/issues/friedman-soc-resp-business.html>. [Accessed 12 August 2016].

Gaur, A., & Kumar, V. (2010). Internationalization of emerging market firms: a case for theoretical extension. In T. Devinney, T. Pedersen, & L. Tihanyi, L. (Eds.). *The past, present and future of international business & management* (pp. 603-627). Bingley, UK: Emerald group publishing limited.

Ghemawat, P. (2007). *A Estratégia e o Cenário dos Negócios* (2nd ed.). Porto Alegre, RS: Bookman.

Ghemawat, P. (2008). *Redefinindo estratégia global: cruzando fronteiras em um mundo de diferenças que ainda importam*. Porto Alegre, RS: Bookman.

Ghoshal, S., & Nohria, N. (1989). Internal differentiation within multinational corporations. *Strategic Management Journal*, 10(4), 323-337.

Gladwin, T. N., Kennelly, J. J., & Krause, T. S. (1995). Shifting paradigms for sustainable development: implications for management theory and research. *Academy of Management Review*, 20(4), 874-907.

Gonçalves-Dias, S. L. F. (2009). Consumo sustentável: muito além do consumo “verde”. Paper presented at the *2nd International Workshop Advances in Cleaner Production*. São Paulo, SP.

Gonçalves-Dias, S. L. F. (2006). Há vida após a morte: um (re)pensar estratégico para o fim da vida das embalagens. *Gestão e Produção*, 13(3), 463-474.

Gonçalves-Dias, S. L. F., & Teodósio, A. S. S. (2006). Estrutura da cadeia reversa: “caminhos” e “descaminhos” da embalagem PET. *Produção*, 16(3), 429-441.

Gonçalves-Dias, S. L. F., Teodósio, A. S. S., Carvalho, C., & Silva, H. M. R. (2009). Consciência ambiental: um estudo exploratório sobre suas implicações para o ensino de administração. *RAE-eletrônica*, 8(1). Available at <http://rae.fgv.br/rae-eletronica/vol8-num1-2009/consciencia-ambiental-estudo-exploratorio-sobre-suas-implicacoes-para->.

Gonçalves-Dias, S. L. F., & Teodósio, A. S. S. (2011). Perspectivas de análise do ambientalismo empresarial para além de demonizações e santificações. *Revista de Gestão Social e Ambiental*, 5(2), 3-17.

Griffiths, A., & Wall, S. (Eds.). (2012). *Applied economics* (12th ed.). Essex, UK: Pearson Education Limited.

Hair Jr, J. F., Black, W. C., Babin, B. J., Anderson R. E., & Tatham, R. L. (2009). *Análise multivariada de dados* (6th ed.). Porto Alegre, RS: Bookman.

Hair Jr, J. F., Babin, B., Money, A. H., & Samouel, P. (2005). *Fundamentos de métodos de pesquisa em administração*. Porto Alegre, RS: Bookman.

Hansen, E. G., Grosse-Dunker, F., & Reichwald, R. (2009). Sustainability innovation cube: a framework to evaluate sustainability-oriented innovations. *International Journal of Innovation Management*, 13(04), 683-713.

Hart, S. L. (2006). *O capitalismo na encruzilhada: as inúmeras oportunidades de negócios na solução dos problemas mais difíceis do mundo*. Porto Alegre, RS: Bookman.

Hawken, P.; Lovins, A.; Lovins, L. H. (2000). *Capitalismo natural: criando a próxima revolução industrial*. São Paulo, SP: Cultrix.

Helin, S., & Babri, M. (2015). Travelling with a code of ethics: a contextual study of a Swedish MNC auditing a Chinese supplier. *Journal of Cleaner Production*, 107, 41-53.

Husted, B. W., & Allen, D. B. (2006). Corporate social responsibility in the multinational enterprise: strategic and institutional approaches. *Journal of International Business Studies*, 37(6), 838-849.

ICLEI. (1996). *Local Governments for Sustainability*. [ONLINE] Available at <http://www.iclei.org/index.php?id=about>. [Accessed 12 December 2016].

Iñigo, E. A., & Albareda, L. (2016). Understanding sustainable innovation as a complex adaptive system: a systemic approach to the firm. *Journal of Cleaner Production*, 126, 1-20.

Instituto Ethos. (2001). *Responsabilidade social empresarial*. [ONLINE] Available at: http://www1.ethos.org.br/EthosWeb/pt/29/o_que_e_rse/o_que_e_rse.aspx. [Accessed 8 January 2017].

Jarillo, J. C., & Martinez, J. I. (1990). Different roles for subsidiaries: the case of multinational corporations in Spain. *Strategic Management Journal*, 11(7), 501-512.

Jay, J., & Gerard, M. (2015). Accelerating the theory and practice of sustainability-oriented innovation. *MIT Sloan School Working Paper Series 5148-15*.

Klewitz, J., & Hansen, E.G. (2011). Sustainability-oriented innovation in SMEs: a systematic literature review of existing practices and actors involved. Paper presented at *XXII International Society for Professional Innovation Management (ISPIM) Conference*. Hamburg, Germany.

Kogut, B., & Zander, U. (1993). Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 34(6), 625-645.

Kolk, A., & Tulder, R. V. (2010). International business, corporate social responsibility and sustainable development. *International Business Review*, 19(2), 119-125.

Lassere, P. (2012). *Global strategic management* (3rd ed.). Palgrave Macmillan.

Lauring, J., & Thomsen, C. (2010). The business of social responsibility: practicing and communicating CSR. In P. Dobers (Ed.). *Corporate social responsibility: challenges and practices*. Stockholm: Santérus Academic Press Sweden.

London, T., & Hart, S. L. (2004). Reinventing strategies for emerging markets: beyond the transnational model. *Journal of International Business Studies*, 35(5), 350-370.

Losada-Otálora, M., & Casanova, L. (2014). Internationalization of emerging multinationals: the Latin American case. *European Business Review*, 26(6), 588-602.

Marconi, M. A., & Lakatos, E. M. (2007). *Fundamentos de metodologia científica* (6th ed.). São Paulo, SP: Atlas.

Martins, M. G., Aligleri, L., & Aligleri, L. A. (2007). Gestão ambiental: estudo de casos nas maiores empresas do sul do Brasil. Paper presented at the *IX Engema*. Curitiba, PR.

Matten, D., & Moon, J. (2008). "Implicit" and "explicit" CSR: a conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404-424.

Maximiano, A. C. A. (2009). *Introdução à administração*. São Paulo, SP: Atlas.

Melo, P. (2009). Prefácio. In J. Ramsey, & A. Almeida (Orgs.). *A ascensão das multinacionais brasileiras: o grande salto de pesos-pesados regionais a verdadeiras multinacionais* (pp. V-VI). Rio de Janeiro, RJ: Elsevier.

Moraes, S. R. R., & Turolla, F. A. (2004). Visão geral dos problemas e da política ambiental no Brasil. *Informações econômicas*, 34(4), 7-13.

Morrison, A. J., & Roth, K. (1993). Developing global subsidiary mandates. *Business Quarterly*, 57(4), 104-110.

Nascimento, L. F. (2005). Gestão socioambiental estratégica: a percepção de executivos de pequenas e médias empresas americanas. *Paper presented at EnANPAD 2005*. Brasília, DF.

Nascimento, L. F., Lemos, A. D. C., & Mello, M. C. A. (2008). *Gestão socioambiental estratégica*. São Paulo, SP: Bookman.

Nidumolu, R., Prahalad, C. K., & Rangaswami, M. R. (2009). Why sustainability is now the key driver of innovation. *Harvard Business Review*, 15 (September), 57-64.

Nölke, A. (2012). The rise of the 'B(R)IC variety of capitalism': towards a new phase or organized capitalism? In H. Overbeek, & B. van Apeldoorn (Eds.). *Neoliberalism in crisis* (pp.117-137). Palgrave MacMillan.

OECD. 2016. Data. [ONLINE] Available at: <https://data.oecd.org/>. [Accessed 15 December 2017].

OECD. 2011. Diretrizes da OCDE para as empresas multinacionais. [ONLINE] Available at: <http://www.pcn.fazenda.gov.br/assuntos/ocde/arquivos/2011-diretrizes-da-ocde-para-empresas-multinacionais-pt-br.pdf>. [Accessed 11 January 2017].

Oliveira Jr, M. M., Boehe, D. M., & Borini, F. (2009a). *Estratégia e inovação em corporações multinacionais: a transformação das subsidiárias brasileiras*. São Paulo, SP: Saraiva.

Oliveira Jr, M. M., Borini, F. M., & Guevara, A. J. H. (2009b). The strategic relevance of the Brazilian subsidiaries of multinational corporations. *Revista de Administração*, 44(4), 285-298.

Oliver, F., & Heblich, S. (2007). Corporate social responsibility: doing well by doing good. *Business Horizons*, 50(3), 247-254.

Pattnaik, C., & Kumar, V. (2014). Emerging market firms in the global economy: an overview. In C. Pattnaik & V. Kumar (Eds.). *Emerging Market Firms in the Global Economy* (pp. XV-XXII), 15. Available at <http://www.emeraldinsight.com/doi/pdfplus/10.1108/S1569-376720140000015009>.

Peattie, K., & Crane, A. (2005). Green marketing: legend, myth, farce or prophesy? *Qualitative Market Research*, 8(4), 357-370.

Pinsonneault, A., Kraemer, K. L. (1993). Survey research methodology in management information systems: an assessment. *Journal of Management Information Systems*, 10(2), 75-105.

Pfeifer, I. (2009, December). Tendências. *Valor Econômico Especial*, p.14-17.

Pinkse, J., Kuss, M. J., & Hoffmann, V. H. (2010). On the implementation of a 'global' environmental strategy: the role of absorptive ability. *International Business Review* 19(2), 160-177.

Pinto, K.; Oliveira Jr, M.; Borini, F. (2013). Corporate social responsibility: a study of Brazilian subsidiaries. *African Journal of Business Management*, 7(6), 405-423.

Portal Responsabilidade Social. (n.d.) *Responsabilidade social*. [ONLINE] Available at: http://www.responsabilidadesocial.com/institucional/institucional_view.php?id=1. [Accessed 12 October 2016].

Porter, M. E. (1986). *Estratégia Competitiva*. Rio de Janeiro, RJ: Campus.

Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78-92.

Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80(12), 56-58.

Porter, M. E., & Linde, C. v. d. (1995, Sep/Oct) Green and Competitive: ending the stalemate. *Harvard Business Review*, 120-134.

Prahalad, C. K. (2010). *The fortune at the bottom of the pyramid* (5th ed.). Pearson Education, Inc.

Ramamurti, R. (2012). Competing with emerging market multinationals. *Business Horizons*, 55(3), 241-249.

Rathert, N. (2016). Strategies of legitimation: MNEs and the adoption of CSR in response to host-country institutions. *Journal of International Business Studies* 47(7), 858-879.

Raupp, F. M., & Beuren, I. M. (2006). Metodologia da pesquisa aplicável às ciências sociais. In I. M. Beuren (Org.). *Como elaborar trabalhos monográficos em contabilidade: teoria e prática*. São Paulo, SP: Atlas.

Ribeiro, D. P. (2008). *Gestão socioambiental estratégica: uma proposta para PMEs* (Dissertação de mestrado, Departamento de Engenharia de Produção, Universidade Federal de Santa Maria). Available at: http://cascavel.ufsm.br/tede//tde_busca/arquivo.php?codArquivo=2555.

Rocha, A., Mello, R. C., & Silva, J. F. (2009). Tendências de internacionalização das empresas brasileiras de serviços. In J. Ramsey, & A. Almeida (Orgs.). *A ascensão das multinacionais brasileiras: o grande salto de pesos-pesados regionais a verdadeiras multinacionais* (pp. 65-860). Rio de Janeiro, RJ: Elsevier.

Roscoe, S., Cousins, P. D., & Lamming, R. C. (2016). Developing eco-innovations: a three-stage typology of supply networks. *Journal of Cleaner Production* 112, 1948-1959.

Roth, K., & Morrison, A. J. (1992). Implementing global strategy: characteristics of global subsidiary mandates. *Journal of International Business Studies*, 23(4), 715-735.

Sampieri, R. H., Collado, C. F., & Lucio, P. B. (2006). *Metodologia de Pesquisa* (3rd ed.). São Paulo, SP: McGraw-Hill.

Savitz, A., & Weber, K. (2007). *A empresa sustentável: o verdadeiro sucesso é o lucro com responsabilidade social e ambiental* (2nd ed.). Rio de Janeiro, RJ: Elsevier.

Schmidheiny, S. (2005). Apresentação. In E. Batista, R. B. CAVALCANti, & M. A. Fujihara (Orgs.). *Caminhos da sustentabilidade no Brasil*. São Paulo, SP: Terra das Artes.

Schumpeter, J. (1942). *Capitalism, Socialism and Democracy*. Harper & Brothers.

Slack, N., Chambers, S., Harland, C., Harrison, A., & Johnston, R. (1999). *Administração da produção*. São Paulo, SP: Atlas.

Sousa, A. C. A. (2008). *A evolução da política ambiental no Brasil do século XX*. [ONLINE] Available at http://www.achegas.net/numero/vinteeseis/ana_sousa_26.htm. [Accessed 12 October 2016].

Stead, W. E., & Stead, J. G. (2004). *Sustainable strategic management*. Armonk: M. E. Sharpe.

Steiner, G. A., & Steiner, J. F. (2000). *Business, government and society: a managerial perspective, text and cases* (3rd ed.). McGraw-Hill.

Sweeney, D. J., Williams, T. A., & Anderson, D. R. (2013). *Estatística aplicada à administração e economia* (3rd ed.). São Paulo, SP: Cengage Learning.

Tan, J. (2009). Institutional structure and firm social performance in transitional economies: evidence of multinational corporations in China. *Journal of Business Ethics*, 86, 171-189.

Tachizawa, T. (2008). *Gestão ambiental e responsabilidade social corporativa: estratégias de negócios focadas na realidade brasileira* (5th ed.). São Paulo, SP: Atlas.

Turcsanyi, J., & Sisaye, S. (2013). Corporate Social Responsibility and its link to financial performance: application to Johnson & Johnson, a pharmaceutical company. *World Journal of Science, Technology and Sustainable Development*, 10(1), 4-18.

Unctad. (2016). Statistics. [ONLINE] Available at http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en. [Accessed 18 January 2017].

Vasconcellos, M. A. S., & Garcia, M. E. (2004). *Fundamentos de economia* (2nd ed.). São Paulo, SP: Saraiva.

Veiga, J. E. (2005). O principal desafio do século XXI. *Ciência e Cultura*, 57(2), 4-5.

Welford, R. (2010). Corporate social responsibility: the next agenda? In P. Dobers (Ed.). *Corporate Social Responsibility: challenges and practices* (pp. 309-322). Stockholm: Santérus Academic Press Sweden.

Wilson, D., & Purushothaman, R. (2003). *Dreaming with BRICs: the path to 2050*. [ONLINE] Available at <http://www.goldmansachs.com/our-thinking/archive/archive-pdfs/brics-dream.pdf>. [Accessed 14 January 2017].

World Bank. (2011). *SMEs: why adopt CSR?* [ONLINE] Available at <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALPROTECTION/EXTLM/0,,contentMDK:20313207~isCURL:Y~menuPK:1245933~pagePK:148956~piPK:216618~theSitePK:390615,00.html>. [Accessed 17 May 2016].

World Bank. (2016). *Databank*. [ONLINE] Available at <http://databank.worldbank.org/data/home.aspx>. [Accessed 19 January 2017].

World Trade Organization. (2015). International trade statistics. [ONLINE] Available at https://www.wto.org/english/res_e/statis_e/its2015_e/its15_highlights_e.pdf. [Accessed 4 November 2016].

Yang, X., & Rivers, C. (2009). Antecedents of CSR practices in MNCs' subsidiaries: a stakeholder and institutional perspective. *Journal of Business Ethics*, 86, 155-169.

Young, S. L., & Makhija, M. V. (2014). Firms' corporate social responsibility behavior: an integration of institutional and profit maximization approaches. *Journal of International Business Studies*, 45(6), 670-698.

ANNEX A – E-mail sent to companies

Em parceria com a revista PIB - Presença Internacional do Brasil, estamos realizando um estudo sobre a competitividade das empresas multinacionais brasileiras.

A pesquisa está sendo conduzida por um grupo de pesquisadores especialistas da USP e FGV, que vem realizando estudos sobre o tema há mais de dez anos.

O objetivo deste projeto é compreender os fatores que têm contribuído para a internacionalização de empresas brasileiras nos mercados internacionais. A experiência acumulada por sua empresa pode trazer grandes contribuições para um melhor entendimento desse tema.

Os resultados serão debatidos em um workshop com especialistas internacionais, na FGV de São Paulo. Eles também subsidiarão uma edição especial da revista PIB sobre as multinacionais brasileiras. Acreditamos que esse compartilhamento de experiências e conhecimento poderá trazer contribuições para a competitividade das empresas brasileiras.

Convidamos sua empresa a participar do estudo, garantindo total confidencialidade dos dados. Os destaques a serem feitos pela revista PIB somente serão realizados mediante o consentimento da sua empresa.

Sabemos quão precioso é o seu tempo e antecipadamente agradecemos a sua contribuição.

Por favor, clique no link para ter acesso ao questionário:
<https://pt.surveymonkey.com/s/Multinacionaisbrasileiras>

Informações complementares:

- Os itens do questionário levantam fatores gerenciais e operacionais relacionados à atuação das empresas no exterior.
- As empresas participantes serão automaticamente incluídas na lista daquelas que receberão os resultados da pesquisa e convidadas a participar de um seminário para divulgação dos resultados na FGV de São Paulo.
- Reforçamos que todos os dados serão tratados de maneira estritamente confidencial. Para tanto, os resultados da pesquisa serão apresentados somente de forma agregada.
- Coordenadores da pesquisa:

Prof. Dr. Afonso Fleury

Departamento de Engenharia de Produção, Escola Politécnica

e-mail: acfleury@usp.br

Profa. Dra. Maria Tereza Leme Fleury

Escola de Administração da Fundação Getulio Vargas

e-mail: mtereza.fleury@fgv.br

Prof. Dr. Moacir Miranda

Faculdade de Economia e Administração da USP

e-mail: mirandaoliveira@usp.br

Prof. Dr. Felipe Mendes Borini

Faculdade de Economia e Administração da USP

e-mail: fborini@usp.br

Prof. Dr. Germano Glufke Reis

Escola de Administração da Fundação Getulio Vargas

e-mail: germano.reis@fgv.br

ANNEX B – Questions in the survey

About CSR

With regard to Corporate Social Responsibility, the corporation:

- Q1. Alleviates social and environmental problems caused by its activities.
- Q2. Discloses social and environmental reports frequently.
- Q3. Provides employees the proper training about environmental, health and safety issues.
- Q4. Invests continuously in anti-fraud communication channels (e-mail, telephone, and ombudsman).
- Q5. Takes into consideration local regulations and demands related to CSR.
- Q6. Operates in countries in which CSR is demanded.
- Q7. Is proactive in terms of complying with local regulation.
- Q8. Has social/environmental certification.
- Q9. Has a reputation of being socially/environmentally responsible.
- Q10. Only works with certified suppliers.
- Q11. Accomplishes CSR training activities with suppliers and/or clients.

About SOI

Evaluate the company regarding innovation

- Q12. When developing new products and processes, the company looks for a better management of natural resources and makes use of sustainable inputs.
- Q13. The company encourages sustainability-oriented innovation and challenges employees to find innovative solutions for new processes and products based on such philosophy.

Q14. The company seeks to discover the perceptions and concerns of different stakeholders (clients, employees, suppliers, unions, NGOs) in the process of developing new products and processes.

Q15. The company can differentiate from competitors due to innovations that take into account social and environmental aspects.