Gerdaus Case Study:
Investigation of a Brazilian Steel Maker reasons
to acquire production in North America

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Abstract

The internationalization process of emerging market multinationals (EMNCs) has been the focus of study of several studies on the recent decades. Importance was given as well to differentiate the patters of those from the multinationals coming from developed countries (MNCs). This study investigates specificities in the path of a Brazilian steel industry, Gerdau, into foreign production in developed countries, Canada and United States. By pointing out the different theories, the case of Gerdau can be better understood not only as an internationalization process, but as well as a company that could reach opportunities in a sector going through a problematic period by acquiring regional players, instead of using exports to reach those markets. Some authors states managerial capabilities being understood as second most important competitive advantage of Brazilian firms, loosing only to differentiated access of natural resources. In this study, we go through the understanding of how this capabilities played important role in a company outside of the natural resources business, supporting Gerdau's successful path.

Key words: Emerging Markets, Internationalization, Entry-mode, Acquisitions, Brazil, Gerdau.
1. Introduction

The reasons supporting the internationalization of companies have been the focus of several researches based on multinational corporations (MNCs) from mature and emerging economies. The same can be stated regarding their entry-mode choice when those companies engage on foreign direct investments (FDIs). An increased attention has been given to the fact that many emerging market multinational corporations (EMNCs) in the recent decades have chosen to internationalize into developed economies, more and more, by partnering, merging or acquiring (M&A) foreign players.

The literature on emerging markets proposes that such trend exist as a result of EMNCs willingness to obtain access to strategic assets they lack in their operation, which would be crucial in order to participate in the global competition. They argue the importance of M&A and joint-ventures as entry modes when those companies engage in foreign production into developed economies, considering it a tool to a fast experimental learning process in line with EMNCs needs (Luo & Tung, 2007; Mathews, 2006, Bonaglia & Goldstein, 2007). In fact, while there are several theories on EMNCs exploring interaction between strategic-asset-seeking behavior and engagement in equity-based entry-modes in developed markets, the study on similar interaction with other motivations is not vastly debated.

Considering Brazil one of the 4 leading emerging economies (Goldman Sachs, 2003), studying the FDI engagement by it's most internationalized firm¹, Gerdau, became a topic of interest, specially once this firm entered North American developed markets acquiring local firms. Gerdau is one of the world top 10 crude steel producers² and engaged in its first foreign production in Canada in 1989, when the country's steel demand was starting to catch up from the stagnation it had in the beginning of the 80s. A mark on its internalization process was in 2002, when after acquiring several regional-focused production plants in United States (U.S.) and Canada, it merged them into one company, forming a leading producer of long steel in the Americas, Gerdau Ameristeel (Gerdau, 2003).

The complexity of the steel business may lead to many perspectives on Gerdau's decision to invest in production facilities in North America instead of exporting from its home-based operations. One of them may be the fact that Canadian and American markets had their steel consumption increased by 88% and 40% in the previous 2 decades before the merger, but increased as well their barriers for steel imports, reaching up to 95% in 2002 (Gerdau, 2002).

¹ Based on a study conducted by Fundaçao Dom Cabral and Columbia University, with 93 top management respondents, pursuing perceptions about their internationalization process, mainly choice of entry mode, determinants of outward investments and their drivers. The internationalization index is a ration between foreign asset possession, number of employees in foreign country and foreign sales results.
² According to World Steel Association's 2009 Ranking (WSA)
1.1 Problem Statement

Mathews (2006) understands that MNCs from developed countries would be driven to internationalize as the possibility to exploit an asset abroad that had previously been developed domestically, while EMNCs would engage in foreign markets to access resources they lack in order to participate in global competition.

The literature on EMNCs debates their choice for using joint-venture and M&As when for strategic-asset-seeking purpose enter operation in developed countries (Mathews, 2006; Luo & Tung, 2007 Demirbag, Tatoglu and Glaister, 2009; Al-Kaabi, Demirbag and Tatoglu, 2010). The investigation of possible relation between equity-based entry modes and other drivers for EMNCs to invest in foreign production is not yet vastly debated and is relevant to International Business context.

This study tries to explore the perspective of bypassing trade-barriers in Gerdau's engagement in foreign production into Canada and United States to exploit domestic markets that had increased steel consumption. The use of acquisition of domestic players to do so will also be investigated, trying to understand the role the previous developed knowledge in domestic acquisition had in such decision, and its relation to company's development of strategic capabilities to participate in the global competition.

1.2 Background

In order to better investigate the problem statement of this study, it is important to contextualize the background of the industry it is inserted in, both global and Brazil-wise. According to Andrade, Cunha & Gandra (2000) the world steel production can be divided into three different historical periods, related to the demand on steel from the other industries.

The first period would be the post-war period until the 70s, when there was an intense development of the industry based on the reconstruction of the infra-structure destroyed in the war, with the steel production's annual average of growth rate on 5% between 1945 and 1979. Brazil was mainly dependent on steel imports until the first half of last century (Andrade, Cunha & Gandra, 2000). In order to depend less on imports, the period between 1952-73 was marked by government's investment on the state-owned firms that would serve as support to the industrialization of other sectors in the country. In 1971 the government launched the National Steel Plan (translation from “Plano Siderurgico Nacional”, NPS), as a formal program to increase production capacity to support domestic consumption (Gerdau, 2001).

The second period, on the 80s, was characterized by the stagnation of the sector in terms of productive capacity in the world. The deceleration of developed economies growth impacted steel demand, and triggered a restructuring period in the sector. United States reduced in more than 40 million tons of production capacity between 1981 and 1982, while Europe reduced in more than 40 million tons/year, and Japan 15 million tons/year. Even with such reductions, in order to be
competitive, the steel industry required development of new technologies and processes that governmental management was not willing to promote. In United States, in 1982 the industry operated at less than 50% of capacity, resulting in losses of about US$2.5 billion, unemployment of 40% of the previous steel labour, and need for technological changes. (CBO, 1984)

In 1980, the Brazilian production capacity over-reached 15 million ton/year, which corresponded to 82% of the NSP. This coincided with the beginning of the decade Brazil went through a great external debt crisis, which made the government lack its ability to finance its investments, and consequently, impacted negatively the demand for steel and decrease business speed for industries in the country (Gerdau, 2001).

The third period, from 1988 until nowadays, is the one where restructuring and consolidation was given priority (Andrade, Cunha & Gandra, 2000). In Brazil the majority of steel companies understood the importance of the international market as a potential and future consumer of surplus production, and thus made increased their efforts on exports. The stagnation of growth in the steel sector in the developed countries and their struggle to restructure their own industries, resulted in intensification on negotiations for import trade barriers between parties from those countries (Gerdau, 2001).

With the necessity of new investments to overcome sector stagnation and difficulties, and impulse by liberal market models, privatization movements marked the 90s. In 1990, state-owned companies accounted for 60% of world production of steel, which nowadays is lower then 20%, concentrated in Russia, Ukraine, and China. The privatization movement served as starting point to internationalization of the sector, and because of the increase in competition, industries in the sector invested on developing more productivity and technology processes in order to increase its profitability. This happened both in the world and Brazilian industries simultaneously. (Andrade, Cunha & Gandra, 2000)

The period during the 90s presented many difficulties for the players in the sector, and different strategies were adopted by them in order to remain operating and consolidate their position in the steel sector.
2. Literature Review

The following section is an overview on internationalization process from MNCs and EMNCs literature, focused on the issues connected to reasons for a company to engage into production in foreign markets and decisions regarding ownership structure when doing so.

2.1 Why do companies internationalize?

The question "why" firms internationalize was first raised by Hymer (1976), as not only considering capital movement within different countries, but actual investment in production operations abroad. The perspective at that time did not narrow such processes down, having FDI mostly understood as international trade and "portfolio theory", where those capital movements were mainly explained as financial operations motivated by possible gains according to interest rate fluctuations between countries. Hymer's theory raised delimitation on drivers of such processes at the time, and introduced insights of "asset-exploitation" within the international business (IB) theories. The author proposed that firms would establish a production facility abroad to explore a specific advantage they have developed and already exploited on their domestic markets. Those advantages, in his definitions, were the result of a firm exploiting an asset in a more profitable way than other firms within its market, and in the foreign country would play an important role in overcoming the liability of foreignness of the firm and lack of knowledge about this market. Firms' specific advantages would constitute a prerequisite and driver for internationalization, and the process would start with an asset located inside the firm. That asset would be able to be employed in foreign markets. (Forsgren, 2008)

The question of “why companies internationalize” over time was answered by the theories with a more dynamic perspective, emphasizing the effort to access capabilities that are outside of the firm as a way to develop new capabilities by combining such knowledge to its already developed capabilities (Madhok, 1997). Combining Hymer's idea of firm-specific advantage to economic theories on transactional and environmental costs, Dunning (1988) presented an Eclectic Paradigm of internationalization. The investment in owning foreign operations is understood as a process resulting of the internalization of activities that could be executed by an outsider part of the company, but would be more costly or inefficient to do so. Summed to that, internalizing those activities would leverage the possibility of developing specific advantages based on imperfections of such markets (Forsgren, 2008). The firm could not only exploit its specific advantage, but also access other advantages related to location specific factors. Those would be such as lower cost of production, possibility to access resources in a better condition, fiscal or exchange rate differences.

The three types of advantages are named by the author as location-specific and internalization ones, and the author understood firms efforts to go abroad as market-seeking, resource-seeking, efficiency-seeking and strategic asset-seeking. The efforts were understood as related both to the
goal of the foreign production to the role foreign subsidiary would play in it (Dunning, 1988; Dunning & Lundan 2008). As market-seeking, the author described the investments oriented to exploit host-country domestic market and eventually those of neighbour countries, normally done substituting exports. Resource-seeking was described as investments done oriented by the possibility to better access relevant resources for the production, being those considered from natural resources and low-cost labour, to technological or other specific capabilities a region or country may offer. Investments oriented by efficiency-seeking are those made on decreasing costs of production, by rationalizing it and obtaining economy of scale. Strategic-asset-seeking are those made as an effort to achieve resources and capabilities that would support company on maintaining and augmenting its core competences, raising the possiblities of participating in long-term competition. (Dunning, 1988)

In response to the question of "why EMNCs engage in internationalization processes into developed markets", Luo and Tung (2007) propose a perspective that the EMNC, specially from Asia, would be the result of efforts from previous domestic firms to access strategic assets. The author suggests that those firms were previously benefited from inward FDIs into their markets, which provided them cooperating experience with global players who have transferred them technological and organizational skills (Gammeltoft, Barnard & Madhok, 2010). Such outward investments would be used as a springboard to access other strategic assets they lack to compete with their global rivals, while leveraging core competences at home, given the fact that their home supply or manufacturing bases allow them to continually enjoy low-cost advantages through their vertically integrated global production systems (Luo and Tung, 2007). The same author unifies theories to explain the different reasons the MNCs have to internationalize, and explains that EMNCs engagement in FDI are related to opportunity-seeking, as exemple: increase firm size and reputation; seizing opportunities in unrelated but promising areas in developed countries; have financial and non-financial incentives from home or host governments; avoid institutional or market constraints at home and, very important, circumvent trade barriers into advanced markets; (Luo & Tung, 2007). Exemples of trade-barriers would be quota restrictions, anti-dumping penalties and special tariff penalties.

2.2 Why using equity-based entry-mode choices?

In regards to the ownership structure companies chose to use when entering production in a new market, many theories are used as base to the discussion on IP (Brouthers & Hennart, 2007), being here summarized on the perspectives of the transaction cost theory (TCT), resource- and institutional based view. The entry-mode choice was understood by the transaction cost related theories concerning control and risk exposure as their main issue, being based on the difference on cost involving protection of rent potential on firm's advantages, and prevention of dissipation of it's knowledge due to the costs of transacting with partner. The resource-based theories understood the resource commitment issue of the decision as well, being concerned with such choice on the
perspective of efficient utilization of firm's resources and capabilities, and further development of them (Madhok, 1997).

Luo & Tung (2007) debate that, regarding the issues previously debated, EMNCs have a greater need to use equity-based entry modes because they have not yet developed proper non-ownership mechanisms to counterbalance the lack of direct ownership control, resulting in higher cost relating to risk exposure. Within equity-based entry-modes are joint-ventures and acquisitions, FDI possibilities vastly debated by the IP literature (Hill, Hwang and Kim, 1990; Demirbag, Tatoglu & Glaister, 2009; Harzing, 2002; Elango & Sambharya, 2004), and here defined as entering a partnership in which the authority control is shared by the company with other partners, and by the purchase of more than 50% of company’s controlling shares, resulting in main authority control over firm acquired managerial decisions. Woodcock, Beamish and Makino (1994) state that the greater degree of ownership the larger the resource commitment. In a joint-venture there is the share and access to some of the internal resources of each partner, increasing the risk exposure of the parts, and because of that, if the firm wants to protect its vital core resources related to its future competitive advantage, acquisitions could be a better entry-mode fit. In joint-ventures the companies would be sharing risk over the operation (Luo & Tung, 2007; Mathews, 2006, Bonaglia & Goldstein, 2007), and the resource commitment need.

The institutional-based theories (IBT) added up to more recent studies the aspect of pressures coming from company’s environments and understand that beyond matters of hierarchical efficiency debated previously, when going abroad companies have the quest to attain legitimacy and conform to host-country environment (Yiu & Makino, 2002). In this way, the entry mode decision are strongly influenced by pressures from the institutional regulative environment, because those impact the organization development and structure (Meyer & Rowan, 1977; Yiu & Makino, 2002). As a result, even if in some cases an specific entry mode would be understood as more efficient, the institutional structure of the host country may provide barriers to it, forcing use of non preferred ones (Roberts and Greenwood, 1997). As an example, even if exporting could provide a possibility of reaching the foreign market in an efficient way with low resource-committing need, if a host-country establishes trade barriers towards the EMNC home country or product, such mode come to be not efficient any more.

Many developing countries provide markets such that the companies there operating have access to low-cost production, due to, for example, devaluation of their currency or amount of cheap-labour availability. In such way, many developing countries build firm specific capabilities depending on their domestic market location specific factor, and for that reason, are dependent on exports from their home-based manufacture hub (Dunning, 1988). When researched on Latin American EMNCs, Curvo-Cazurra (2007) understood that their selection of value-added activities abroad would be driven by both the difficulties in internationalization and advantages of having those activities on specific markets. The author stated that those firms could be classified in 4 main groups, being one of them the ones that benefited from home country local advantages, which use establishment of a
marketing subsidiary to support their exports to foreign markets. But the companies that did not have this connection to the home country, or had products that had difficulties to be transferred, mainly established a production facility in the host country. The last ones would not be able to serve those markets properly by using exports, and FDI in foreign production would be their bridge to those markets, following the example given in the previous paragraph, and the opportunity-seeking to bypass trade barriers debated by Luo & Tung (2007) before.

When the need to conform to institutional environments is being debated, the use of different entry-modes as a tool to gain legitimacy under conditions of uncertainty has also been the focus of IP studies (Yun & Makino, 2002). The contrast on MNCs and EMNCs entry-mode choice can be seen when comparing, for example, the studies of Brouthers (2002) and Al-Kaabi, Demirbag and Tatoglu (2010). The first one when studying connection between entry-modes and performance of European Union companies, stated that firms would prefer having the major authority over its operations instead of a joint-ventures when: entering countries with few legal restrictions on mode of entry, when entering low investment risk markets, and when entering high growth markets. The second one, when studying the IP case from a mobile telecom company from Qatar, observed that in mature markets, with few legal restriction on mode of entry and low investment risk, the company had decided to enter through a joint-venture with a player with already established network, to gain rapid access to those, while in countries without developed networks, this company would prefer entering the market by itself. It is important to highlight that in the mobile business, the network development is dependent to government issue licenses. In this sense, the legitimacy gain seems for this company as a main issue, combined with the time demanded to develop an operation in each of the modes, having through a joint-venture a fast access to an asset it needed to operate in the market. In such way, joint-venture served as necessary bridge for their market-seeking purpose of being in those countries.

Yun and Makino (2007) debated also cognitive aspects of institutional environments, including decision makers mindsets and the affect on judgement of situations similar that fall into the same cognitive category. Similarly, more recent studies have highlighted the role of previous experience in mergers and acquisitions in the choice of subsequent international acquisitions (Collins, Holcomb, Certo Hitt & Lester, 2008). Based on organizational learning theories, the author debated that firms that have engaged in M&A activities develop acquisition process knowledge and skills regarding such process, including due diligence, deal negotiation, financing and integration. By becoming familiar with such process and repetition, firms gain experience and confidence, and this lead them to repeat learned behaviors by pursuing similar experience in the future. Haleblilian and Rajagopalan (2006) also supported that acquisition experience influence likelihood of subsequent acquisition when acquisition performance was positive. Above other conclusions, Collins, Holcomb, Certo Hitt & Lester (2008) states that domestic acquisitions influence subsequent international M&A.

Carvalho, Costa and Duysters (2010) states Brazilian managers consideration of own managerial
capabilities as one of Brazilian EMNCs biggest competitive advantage. Those are understood to be
developed because they have lived the adverse period of high political and economical instability,
which have made them more eager to be active in ways to facilitate structure for business in order
not to lose few opportunities available, and can be summarized in the definition of what the locals
name jeitinho: “the Brazilian knack for getting around obstacles to doing business” (The
Economist, 2009). Regarding getting around obstacles, Barbosa (2005) stated that for industries
where supply negotiation contracts are based in long-term relationship due to characteristics of the
product that adaptation between the parties, established client portfolio would be of a great value for
entry mode decision. Acquisition would be able to provide instant access to such assets, as well to
logistic and distribution network already developed, market-share (Elango & Sambharya, 2004),
and without the need of previously developed knowledge to overcome its liability of foreignness in
the first moment (Elango & Sambharya, 2004). Joint-ventures provide possibilities to share the risk
over operation and the resource commitment need, but demand finding a willing and suitable
partner, that does not bring any risk exposure to company's strategy (Hill, Hwang and Kim, 1990).
In countries with high regulatory restriction on foreign investment, joint-venture can be a favorable
solution (Yiu and Makino, 2007). In industries with high concentration, acquisitions may be
preferred (Elango & Sambharya, 2004).

2.3 Purpose

Regarding reasons to invest in foreign production, Cuervo-Cazurra (2007) stated when studying IP
of Latin American EMNCs that some of them have difficulties in transferring their products across
boarders, and “as a result, they must establish production facilities to serve clients abroad”. Such
willingness to exploit host-countries is named by Dunning (1988) as market-seeking. Luo & Tung
(2007) also supported similar argument, and debated the use of direct investment in production in
target country or third one, simply to be able to bypass trade barriers imposed to their home-
countries, and naming it one opportunity-seeking driver.

About entry-mode choice Mathews (2006) states that EMNCs “are not concerned to establish solid
international structures”, but rather quickly develop flexible ones. Luo & Tung (2007) states that
large EMNCs rapidly expand “through high-risk, high-control entry modes such as acquisitions” as
a result of their main concern in facilitating accelerated international expansion.

Collins, Holcomb, Certo Hitt & Lester (2008) states that firms tend to repeat the use of M&A as
entry-mode when they have achieved positive experiences with that in the past. The author states
that because of the confidence gained on the repetition of the process, the mode is then seen as less
risky.

Proposition: Gerdau’s was market-seeking when engaged in FDI in Canada and United States, and
opportunity-seeking to use this production to bypass their trade barriers. Their successful
experience with it in the domestic markets served as base to their choice for acquisition in such step.
3. Methodology

3.1 Research Design

The primary goal of this paper is to explore Gerdau's market-seeking and bypass trade barrier opportunity-seeking when engaged in production in North America, and their choice for acquisition of regional players in order to do so. Once motivation is subject of managerial behavior, a qualitative study was understood as the most appropriate method to investigate the issues related to the purpose of this study. The proposition guiding this study is deemed to a built a perspective of this step on Gerdau's internationalization by exploring and examining relationships and concepts in the theory and data. For this reason, a case analyze was understood to be most suitable and appropriated, combining the vast amount of rich second data available from different sources, with directed primary data produced on interview with executive of the firm. The theories on emerging markets multinational corporations (EMNCs) does not yet cover in dept possible relations between motivations other the strategic asset-seeking and equity-based entry-modes, and a qualitative type of research was taken as the ideal to generate relevant information and result in analyses of those.

3.2 Case Selection

Gerdau is considered the Brazilian company with highest index of internationalization\(^3\) according to "Global Players from Emerging Markets" survey\(^4\). From the top 3 most internationalized companies from the country, which includes Petrobras and Companhia Vale do Rio Doce, Gerdau is the only one without governmental ownership background. The choice of exploring Gerdau in a case study was understood as appropriate. The understanding of the specificities of Gerdau's engagement in FDIs can leverage relevant knowledge for other businesses, and raise academic questions on internationalization process, entry-mode choice, and learning in organizational theories.

Once the company is now present in 15 number of countries, and the whole internationalization process had vast amount of possible interesting specificities, I understood that focusing the study in its engagement in production into North America (being Canada and United States) could be interesting because it was the first “developed markets” the company entered production in. In this way, the period I have centralized my research was from 1989 until October 2002. The period started with Gerdau first FDI in production in Canada and goes until the merge of its assets in Canada and U.S. with the ones of Co-Steel, resulted in an operation 74% owned by Gerdau. With the past event, Gerdau reached top 15 crude steel producers\(^5\). Data was collected from previous and following years in order to better contextualize the scenario for the case.

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\(^3\) Based of foreign asset possession, number of employees in foreign country and foreign sales results.

\(^4\) Conducted by Fundaçao Dom Cabral and Columbia University, with 93 top management respondents, pursuing perceptions about their internationalization process, mainly choice of entry mode, determinants of outward investments and their drivers.

\(^5\) According to World Steel Association's 2002 Ranking
3.3 Data Collection

The research was started by contacting Gerdau’s Headquarters in Porto Alegre, Brazil, asking for their operation information from the beginning of its operation until the merger with Co-Steel, in 2002.

In parallel, I have gathered information from their Investor Relations site and study their Financial Statements, Annual Reports, and 20-F Forms for the years available, and also the website of the Iron and Steel International Institute and World Steel, that provide vast amount of statistics of Steel production and consumption back from the 1970s.

The material provided vast amount of data, and helped me to collect information of the company's operations, both foreign and domestic, and information about the steel markets. Other secondary data available was used as support providing quality information that were taken in consideration, such as newspaper articles from the period, academic articles that covered taxation on United States, steel sector consolidation research, case studies on Gerdau, and problematics that were understood to be related to the purpose of this research.

I identified and collected names of the top executives of the company, working there during the period studies, through the business online network platform Linked-in, and also with personal contacts that knew executives in the company. I sent a presentation e-mail with a request for a brief conversation over the phone to 20 of them.

These effort resulted in a phone appointment with the Financial Director, who works in the company from 1988, and had been expatriated to both operations in Canada and United States, having participated in the operation and strategic process of entering both markets. The conversation had to be taken on the phone due to the fact that I am situated in Sweden and he is situated in Brazil.

Previous to the meeting, I have collected the information on the company's operation and the steel markets during the process studied, and based on the data have raised ideas of why Gerdau would be motivated to invest on foreign production and to acquire local players. This raw data is presented in the section “4. Case Study – Gerdau's Raw Data and Findings on the Company and Steel Markets”. The choice of theories to be reviewed was a result to the understanding of those being more effective in support and confront the company's case. Theories were reviewed and formed the theoretical framework presented on section “2. Literature Review”.

The steel industry is base raw material supplier to several other industries, making it a key sector for economic development. This fact makes the steel business even more complex than other manufacturing industries, and by that, several motivations can be investigated on Gerdau step into acquisition of North American production. In order to prioritize a deeper analyzes, this study chose to aim the investigation of the perspective on FDI in production acquisition in North America being opportunity-seeking to bypass trade-barrier and market-seek, and the relation with company's
previous knowledge in acquisition processes.

With a rough scenario constructed, the conversation on the phone was done with Financial Director, which lasted around 30 minutes, and focused on trying to understand if the ideas raised by the collection of data and theory review described before could be practically confirmed. To do so, I asked him to first describe the decision of entering foreign production in both Canada and U.S. . During his description I asked him to relate to specific points driven by the secondary data base. The primary data produced in the interview was analyzed and added along the raw data section.

Even thou the interview was short, the executive was able to provided me with enough primary data to cross check and verify the validity of the previous framework formed with the theory and second data.

3.4 Limitations

The complexity of internationalization processes leads to the possibility of the analyze of its motivations and entry-mode choice being vast, and taken from many different perspectives. This study had limited amount of resources and time to analyze this process in its whole complexity, and for this reason has chosen to focus its efforts on the opportunity to bypass trade-barrier Gerdau would have if engaged in production in Canada and United States and its subsequent choice of acquisition as entry-mode.

Another limitation to be considered is that this research was limited by the low response from executives that were able to participate and limited amount of available operational data from the period. Once the number of interviews was low, the investigation of the relation between previous domestic acquisition experience and following choice for that in the international markets, for example, was based on measurements such as increase of profitability performance and increase of taken market-share, both able to be validates by the financial and marketing perspective. The decision for acquisition being related to having access to already set structure also had its analyze being limit by the lack of data from when the units were acquired regarding client and supplier's contract, for example.

It is understood that the outcome of this study cannot be generalized, but resulted in areas that can be further researched in the fields of emerging markets, IP process, and organizational structure. Both the information generated as primary and secondary data is taken as not free of biased perspective from aspects involving culture, predispositions and ideals from this author, the author of the sources, and the executives I have spoken to.

In this section the reader will be introduced to facts about the company domestic acquisitions, its first FDI into Uruguay, and the North American steel markets and the company's expansion into it. The idea is to present findings that will support the following analyses and discussion in the next section.

In 110 years of operation, Gerdau raised from a small nail factory into one of the leading Long Steel producer in Americas. The company began its operations in 1901 when Johannes Heinrich Kaspar Gerdau bought the Pontas de Paris Nail Factor, and nowadays has developed to be a group compromising subsidiaries, associates and joint-ventures engaged in production and sale of steel in Brazil, Argentina, Chile, Colombia, Guatemala, Mexico, Peru, Dominican Republic, Uruguay, Venezuela, United Stated, Canada, Spain and India.

The company employees over than 40,000 people, its annual installed production capacity is more than 25 million tons of steel, and is listed in Sao Paulo, New York and Madrid stock exchanges. Gerdau produces long steel, special steels and flat steels, serving the sectors of civil construction, industry, automotive and agriculture.


The company's expansion from a simple nail factor started first domestically, in 1948, when it was having difficulties on importing raw material for its production during the second world war, and for this reason, decided to get into the steel industry, by acquiring Siderurgica Riiograndense in the state of Rio Grande do Sul, Brazil (Gerdau, 2002).

During the following decades Gerdau acquired several plants in Brazil, many of them during the privatization program launched by the government during the mid-80 when the government decreased its investments in the sector due to its debt crisis and economical environment.

In 1994 Gerdau engaged in the acquisition of an plants in Pains, Minas Gerais. The Brazilian anti-trust authority first denied the possibility of Gerdau acquiring the unit, and after negotiating, in 1996, the operation was allowed. The company's Financial Director stated that Gerdau had by then reached a high market-share of the country's steel production capacity, estimated at that time in 45% of country's overall, and from the anti-trust perspective, the company had limited possibilities to expand its' production capacity domestically by acquisition of capacity, and by that, limit to reach its growth plans.

Jorge Gerda Johannpeter, CEO of the group between 1983 and 2006, stated “Globalization pulled us out of our geographical limits; there would not be room for our growth if we had kept our production only in Brazil”. (Ferreira, 2007)

A summary of the domestic acquisition until 2002 may be seen in the table above.
As seen in the background section, while until the 70s, in a post war period, the world production in the 1980s was significantly lower, with production capacities that were not always able to meet local demands. However, starting in the 80s, as the economy started to recover, local demands increased, and Gerdau started to expand its operations in the region. This expansion was driven by a variety of factors, including a desire to be closer to customers, to gain market share, and to take advantage of economies of scale.

Table 1 – Year of Acquisition/Start-up and Location of Units, from 1901-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Firm</th>
<th>Location</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>Açominas Siderurgica Araçariguama</td>
<td>Ouro Branco – MG</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1948</td>
<td>Siderurgica Riograndense</td>
<td>Porto Alegre – RS</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1957</td>
<td>Usina Rio dos Sinos</td>
<td>Sapucaia do Sul – RS</td>
<td>Construction</td>
</tr>
<tr>
<td>1967</td>
<td>Indústria de Arames São Judas Tadeu</td>
<td>São Paulo – SP</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1969</td>
<td>Siderurgica Açominares</td>
<td>Recife – PE</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1971</td>
<td>COSIGUA</td>
<td>Santa Cruz – RJ</td>
<td>Joint-venture</td>
</tr>
<tr>
<td>1972</td>
<td>Siderurgica Guara</td>
<td>Aracaria – PR</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1974</td>
<td>COMESA</td>
<td>Atalaia – AL</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1981</td>
<td>Siderurgica Careense</td>
<td>Maracanaú – CE</td>
<td>Construction</td>
</tr>
<tr>
<td>1986</td>
<td>Usina Siderurgica Paraense</td>
<td>Contagem – PA</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1986</td>
<td>Companhia Brasileira de Ferro</td>
<td>Viana – ES</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1989</td>
<td>Usiba</td>
<td>Salvador – BA</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1991</td>
<td>Cosinor</td>
<td>Recife – PE</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1992</td>
<td>Açôs Finos Piratí</td>
<td>Charqueadas – Ří</td>
<td>Acquisition</td>
</tr>
<tr>
<td>1994</td>
<td>Siderurgica Painis</td>
<td>Divinópolis – MG</td>
<td>Acquisition</td>
</tr>
<tr>
<td>2001</td>
<td>Siderurgica Aracariguama</td>
<td>Aracariguama – SP</td>
<td>Construction</td>
</tr>
<tr>
<td>2001</td>
<td>Açominas</td>
<td>Ouro Branco – MG</td>
<td>Acquisition</td>
</tr>
</tbody>
</table>

Source: Compilation from Gerdau's website data

The improve on the financial results of the plants Gerdau acquired in its domestic markets can be illustrated with some following examples. By comparing the results of the units one year prior to acquisition until 5 years later, we can see the increase on the profitability of them.

Table 2 – Acquired Domestic Units and its Performance Numbers

<table>
<thead>
<tr>
<th>COMANY – Date of Purchase</th>
<th>Prior to Purchase</th>
<th>Fiscal Years following Purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of Crude Steel (in 1,000 tons)</td>
<td>not available</td>
<td>35.1</td>
</tr>
<tr>
<td>Revenue (US$ millions)</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Net income (US$ millions)</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Production of Crude Steel (in 1,000 tons)</td>
<td>not available</td>
<td>11.9</td>
</tr>
<tr>
<td>Revenue (US$ millions)</td>
<td>not available</td>
<td>5.8</td>
</tr>
<tr>
<td>Net income (US$ millions)</td>
<td>0.02</td>
<td>0.4</td>
</tr>
<tr>
<td>Production of Crude Steel (in 1,000 tons)</td>
<td>4.7</td>
<td>11.3</td>
</tr>
<tr>
<td>Revenue (US$ millions)</td>
<td>0.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Net income (US$ millions)</td>
<td>(1.7)</td>
<td>0.4</td>
</tr>
<tr>
<td>Production of Crude Steel (in 1,000 tons)</td>
<td>3.16</td>
<td>315.9</td>
</tr>
<tr>
<td>Revenue (US$ millions)</td>
<td>101.8</td>
<td>78.8</td>
</tr>
<tr>
<td>Net income (US$ millions)</td>
<td>(19.2)</td>
<td>(12.6)</td>
</tr>
<tr>
<td>Production of Crude Steel (in 1,000 tons)</td>
<td>171.9</td>
<td>141.4</td>
</tr>
<tr>
<td>Revenue (US$ millions)</td>
<td>66.8</td>
<td>61.3</td>
</tr>
<tr>
<td>Net income (US$ millions)</td>
<td>(21.0)</td>
<td>(5.1)</td>
</tr>
<tr>
<td>Production of Crude Steel (in 1,000 tons)</td>
<td>4.382</td>
<td>502.7</td>
</tr>
<tr>
<td>Revenue (US$ millions)</td>
<td>138.8</td>
<td>253.0</td>
</tr>
<tr>
<td>Net income (US$ millions)</td>
<td>2.6</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Source: Compilation of data on 1999 Form 20-F (Gerdau, 1999)

In 1980 Gerdau engaged in its first FDI in production, when acquired Laisa, a mini-mill in Uruguay, in 1980. As Uruguay is the country in the border with the state Gerdau had its main operation, Rio Grande do Sul, the executive interviewed stated that the acquisition was made much more to support increase of local market demands than as part an internationalization plan. The executive also highlighted the fact that this unit had fast increase on productivity, already in the following year of the acquisition.

4.2 North American Market Data and Gerdau's investments on it

As seen in the background section, while until the 70s, in a post war period, the world production...
capacity of steel was intensified specially in developed countries as response to the high consumption of the material on the reconstruction of the infra-structure destroyed before, the 80s represented a stagnation of the demand of steel, mainly from the deceleration of the developed economies growth. Such situation caused decrease on prices, excess of production capacity and need of investment on the sector in order to be able to produce with lower costs, and guarantee profitability. Besides the scenario described before, there was a decrease of economic stability in Brazil coming from the government's debt crises. The data about consumption and production in United States, Canada and Brazil can be seen in the table bellow.

Table 3 – Steel Consumption and Production in U.S., Canada and Brazil, in thousands of tons

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Canada</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>127,304</td>
<td>11,085</td>
<td>6,088</td>
</tr>
<tr>
<td>1971</td>
<td>127,663</td>
<td>11,753</td>
<td>7,386</td>
</tr>
<tr>
<td>1972</td>
<td>138,410</td>
<td>12,842</td>
<td>7,662</td>
</tr>
<tr>
<td>1973</td>
<td>149,595</td>
<td>14,153</td>
<td>9,513</td>
</tr>
<tr>
<td>1974</td>
<td>144,120</td>
<td>15,458</td>
<td>12,799</td>
</tr>
<tr>
<td>1975</td>
<td>116,821</td>
<td>13,178</td>
<td>11,241</td>
</tr>
<tr>
<td>1976</td>
<td>129,953</td>
<td>12,570</td>
<td>10,715</td>
</tr>
<tr>
<td>1977</td>
<td>133,923</td>
<td>12,828</td>
<td>11,976</td>
</tr>
<tr>
<td>1978</td>
<td>146,445</td>
<td>13,524</td>
<td>11,932</td>
</tr>
<tr>
<td>1979</td>
<td>140,906</td>
<td>15,525</td>
<td>12,760</td>
</tr>
<tr>
<td>1980</td>
<td>114,433</td>
<td>13,306</td>
<td>14,303</td>
</tr>
<tr>
<td>1981</td>
<td>128,969</td>
<td>14,118</td>
<td>12,063</td>
</tr>
<tr>
<td>1982</td>
<td>84,290</td>
<td>9,418</td>
<td>10,612</td>
</tr>
<tr>
<td>1983</td>
<td>94,484</td>
<td>10,771</td>
<td>8,580</td>
</tr>
<tr>
<td>1984</td>
<td>111,714</td>
<td>13,089</td>
<td>10,673</td>
</tr>
<tr>
<td>1985</td>
<td>105,593</td>
<td>13,183</td>
<td>11,995</td>
</tr>
<tr>
<td>1986</td>
<td>95,286</td>
<td>12,080</td>
<td>14,528</td>
</tr>
<tr>
<td>1987</td>
<td>101,468</td>
<td>13,013</td>
<td>14,980</td>
</tr>
<tr>
<td>1988</td>
<td>110,698</td>
<td>15,019</td>
<td>11,720</td>
</tr>
<tr>
<td>1989</td>
<td>102,351</td>
<td>13,904</td>
<td>12,462</td>
</tr>
<tr>
<td>1990</td>
<td>103,052</td>
<td>11,222</td>
<td>11,048</td>
</tr>
<tr>
<td>1991</td>
<td>89,600</td>
<td>10,688</td>
<td>11,245</td>
</tr>
<tr>
<td>1992</td>
<td>97,372</td>
<td>11,160</td>
<td>10,712</td>
</tr>
<tr>
<td>1993</td>
<td>104,357</td>
<td>12,714</td>
<td>12,658</td>
</tr>
<tr>
<td>1994</td>
<td>117,471</td>
<td>15,324</td>
<td>13,472</td>
</tr>
<tr>
<td>1995</td>
<td>112,584</td>
<td>15,047</td>
<td>14,639</td>
</tr>
<tr>
<td>1996</td>
<td>119,433</td>
<td>14,555</td>
<td>15,793</td>
</tr>
<tr>
<td>1997</td>
<td>123,589</td>
<td>17,722</td>
<td>18,730</td>
</tr>
<tr>
<td>1998</td>
<td>134,634</td>
<td>18,780</td>
<td>17,700</td>
</tr>
<tr>
<td>1999</td>
<td>125,143</td>
<td>18,488</td>
<td>16,302</td>
</tr>
<tr>
<td>2000</td>
<td>133,353</td>
<td>19,800</td>
<td>17,500</td>
</tr>
<tr>
<td>2001</td>
<td>114,397</td>
<td>16,900</td>
<td>18,500</td>
</tr>
<tr>
<td>2002</td>
<td>118,268</td>
<td>17,671</td>
<td>19,673</td>
</tr>
</tbody>
</table>

Source: Compilation of data available on World Steel Institute Production and Consumption Statistics Records.

When asked about the trade-barriers imposed to steel products by the U.S. government, the executive from Gerdau stated they would “come and go” according to different periods of time, steel imports and U.S. steel manufacture situation. In 1984, U.S. Government announced a quota on steel imports for a period of 5 years. The idea was to limit imports to only 15% of the country's consumption to increase the results of the steel industry structure on the country, strongly affected in 1982 and 1983 (CBO, 1984), as discussed in the background. In 1988 the U.S. Government announced an extension of 2.5 years of the steel import quotas plan. In the same year United States
and Canada signed the Free Trade Agreement, implementing trade liberalization between their boarders, (Trefler, 2001), and Gerdau engaged in its second FDI in production, with the acquisition of Courtice Steel Inc. in Canada.

According to Gerdau's executive, what the company is good at is managing its steel production assets. The operational and financial knowledge supporting it were developed in its domestic expansion experience, creating synergies and benchmark through its units. The intention of the company when first engaged in production in Canada was to access the U.S., due to the understanding of being highly fragmented steel markets, with opportunities for consolidation. The executive also stated that their choice for acquiring in Canada instead of the United States was a result to the good business opportunities available for sale, and not a strategy regarding country.

Courtice Steel had already distribution channels and clients established, but was facing financial and managerial problems, and the first years after the acquisition were extremely difficult in Gerdau's plan of recovering operation, according to it's interviewed executive. In the financial statement 20-F, from 2002, there is the statement that when Gerdau acquired Courtice the company had loss in its last 3 years, and such situation provided Gerdau the opportunity to augment its knowhow in management and restructure process, while being in North American markets, with intense dynamic competition.

In June 1995 Gerdau decided to increase its production capacity in Canada, and acquired MRM Special Sections. According to the company's financial documents “Gerdau became aware of an opportunity to acquire MRM, historically a profitable production facility and a quality producer of special shapes and other rolled products complementary to Courtice's product line” (Gerdau, 1999). The executive interviewed confirmed that different than Courtice MRM was already a profitable operation when acquired. He also stated that this acquisition opportunity happened due to the previous owners of the company, a Japanese group, need of capital to invest in its own home country, and for that reason being interested in selling their operation in Canada. The capacity of MRM when acquired was of 156.4 thousands tons of Crude Steel and 142.4 thousand tons of Long Rolled Products. In the same financial document the company states that its foreign operations are primarily devoted to supplying its domestic markets, with the exception of Canadian operation, which sell almost 50% of their production in the United States, with direct sales to customers there.

United States presented an historical deficit of steel production from the 1970s, that can be better seen by comparing the numbers of production and consumption of the Table X. In 1999 several articles on papers covered the negotiations on import tariffs between U.S. government, U.S. steel producers, and steel producers that exported to U.S. (Morici, 2002), with the allegation that the last ones had a dumping policy, exporting to the country products at a lower price than its production cost. Such negotiations ended up with import quotas again, with delegation of specific amount of each steel product for exporting countries, but not yet import tariffs for Brazilian companies. The import of steel products with lower cost impacted the prices of steel in that market until 1999, and
such decrease on price can be summarized by some long steel product prices graph bellow.

**Graph 1 – U.S. Prices for Long Steel Products period 1980 – 2002, average prices during June in US$/ton**

Gerdau completed the acquisition of AmeriSteel in the end of August, in the same year of 1999. Ameristeel was engaged in the manufacture and sale of long steel products from recycled scrap raw material, with coverage of the entire United States, with exception of the West Coast. The production capacity of the company was of 1.8 million tons of crude steel, and with this acquisition Gerdau tripled its production outside of Brazil, and passed from 46th to 25th main steel producers in the world (ROHTER, 2001). In 2001, complementing the assets of Ameristeel, Gerdau purchased Cartersbille Steel Mill, in Georgia.

North America steel production reached 122.6 million tons in 2002, 94.2 million of which were produced in the United States. In March of the same year president George W. Bush placed 8-30% as tariff on imports of Steel, referred as “Section 201” (as a reference to Section 201 of the 1974 Trade Act, which allows the President to restrain imports—even if fairly traded—provided the ITC finds that imports have been a substantial cause of injury to a domestic industry (CBO, 1984)). The import tariff had the aim to recover prices, and consequently the U.S. Steel Industry, that was suffering from the pressures of competition with lower cost imports (Morici, 2002).

The base import tariff for steel products was fixed to 15%, having some countries with other specific negotiation. Brazilian steel kept having import quotas, as previously negotiated, and the over-the-quota tariff for Brazilian steel products ranged from 74% to 95%. The results of the implantation can be seen in the table bellow, from 290.3 thousand tones in February 2002 to 45.3 in the following month, and 29.3 in December of the same year. The average price in the first quarter of 2002 per ton was about US$ 240, and in the final quarter of the same year reached about US$250. The table bellow shows the numbers of U.S. rebar imports in 2001, and after the import tariff implementation. (Gerdau, 2002)
In October, 2002, Gerdau unified its assets in North America with the ones of the Canadian Co-Steel in order to create Gerdau Ameristeel, nowadays the second main producer of long steel in North America. The merger was structured so Co-Steel shareholders owned 26% of the outstanding shares of the new company, and Gerdau owned the remaining 74%. The shares of the company, Gerdau Ameristeel, remained being traded on Toronto bourse, as Co-Steel were. Besides having production of long steel, Co-Steel had 50% of Gallatin Steel, which produced flat steel. With this merger Gerdau reached 6.8 million tons of production capacity in North America. This transaction, evaluated in US$ 382 million in 2002, allowed Gerdau to reach the segment of flat steel. (Gerda, 2002)

This process of engagement in North American market with the consolidation of the merger was described by Jorge Gerdau Johannpeter as the decisive mark on the internationalization process of the company. The ex-CEO of Gerdau stated that the merger coincided with an economical uncertainty for the whole world industry, and by having a financed structured operation with management experienced in restructure process, the position intended to get benefited and lead the restructure of industry in North America. The company's Annual Report from 2003 brings the statement that such merger was in-line with company's expansion strategy of conquering market-share in valuable markets by acquiring companies with operational problems, with prices that were understood by Gerdau as gainful by converting them into efficient and profitable through use of its management knowhow. (Gerda, 20032)

The information about all international acquisition of the period is summarized in table bellow.
Table 5 – Year of Acquisition/Merger, Location of Units and Production Capacity, in thousand tons and within the period of 1980 - 2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Firm</th>
<th>Location</th>
<th>Mode</th>
<th>Production Capacity (Crude Steel – C) (Laminated Steel – L)</th>
<th>Transaction Value (US$ mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>Laisa Steel Maker</td>
<td>Uruguay</td>
<td>Acquisition</td>
<td>42 C / 44 L</td>
<td>not available</td>
</tr>
<tr>
<td>1989</td>
<td>Courtice Steel Incorporation</td>
<td>Canada</td>
<td>Acquisition</td>
<td>360 C</td>
<td>52.0</td>
</tr>
<tr>
<td>1992</td>
<td>Indac</td>
<td>Chile</td>
<td>Acquisition</td>
<td>18 C / 15 L</td>
<td>3.0</td>
</tr>
<tr>
<td>1992</td>
<td>AZA Steel Maker</td>
<td>Chile</td>
<td>Acquisition</td>
<td>25 C</td>
<td>7.0</td>
</tr>
<tr>
<td>1992</td>
<td>Inlasa</td>
<td>Uruguay</td>
<td>Acquisition</td>
<td>60 C / 100 L</td>
<td>6.7</td>
</tr>
<tr>
<td>1995</td>
<td>Manitoba Rolling Mills (MRM)</td>
<td>Canada</td>
<td>Acquisition</td>
<td>360 C</td>
<td>92.5</td>
</tr>
<tr>
<td>1997</td>
<td>Sociedad Puntana S.A. (SIPSA)</td>
<td>Argentina</td>
<td>Acquisition</td>
<td>75 L</td>
<td>10.0</td>
</tr>
<tr>
<td>1997</td>
<td>SIPAR</td>
<td>Argentina</td>
<td>Acquisition</td>
<td>160 L</td>
<td>25.3</td>
</tr>
<tr>
<td>1999</td>
<td>AmeriSteel</td>
<td>USA</td>
<td>Acquisition</td>
<td>1,800 C / 1,700 L</td>
<td>472.0</td>
</tr>
<tr>
<td>2001</td>
<td>Birmingham Southeast</td>
<td>USA</td>
<td>Acquisition</td>
<td>400 C / 725 L</td>
<td>48.0</td>
</tr>
<tr>
<td>2002</td>
<td>Co-Steel</td>
<td>USA</td>
<td>Merger</td>
<td>3,100 C</td>
<td>382.0</td>
</tr>
</tbody>
</table>

Source: Compilation from data on Gerdau’s annual and quarters Financial Reports and Announcements to Markets
5. Analysis and Discussion

The purpose of this thesis is to explore the perspective of Gerdau's engagement in production in North America as bypass trade-barrier opportunity-seeking and market-seeking, and their choice for doing so through use of acquisition of domestic players. In order to analyze and discuss such point, this section is structure in covering those reasons, and then exploring the previous developed knowledge in acquisition processes and the role of it in their step in North American production.

5.1 Reasons why Gerdau could have entered production in North America

There are several reasons that may have motivated Gerdau to enter production in North America, based on different perspectives one can take on this step. Once this study aimed to explore the opportunity to bypass trade barrier and market-seek Gerdau's had by engaging on production into Canada and United States, those motivations will be analyzed and discussed from the data and theories previously presented.

5.1.1 Market-seeking driver

The previous year to Gerdau's first investment in Canada, 1988, in a period in which the developed economies were decelerating its growth, the country steel demand was higher than its production, for the first time in more than 15 years. According to data on Table 3, its consumption was increasing by more than 12% in the 1980-1988 period, while the Brazilian one was strongly impacted by the economic moment of the country, decreasing by more than 18%. Also, the proximity with United States could also be interesting, specially because both countries in the same year finalized the negotiation of a trade liberalization between them, resulting in possibility of exploring both host-countries domestic markets. Even thou the consumption in United States in the period was decreasing by more than 3%, its production output was decreasing by more than 17%, as seen in Table 3, keeping the country's deficit and demand for imports.

From 1993 the Brazilian consumption of steel starts to rapidly increase, from 10 million tons in 1992, to 17 million tons in 1997, as can be seen in Table 3. During this period Gerdau strongly invested in acquisition of domestic units to benefit from the substantial growth in market demand expansion, as seen in Table 1. In 1994 it reached 45% market-share of domestic production capacity and started to face limitation on the anti-trust perspective, as stated by its executive. This can be seen as a barrier to a export-based operational structure, once it may strongly limit the possibilities of company developing new markets if not investing time to build production from scratch, or investing in acquisition of instant production capacity outside its frontiers.

In the Table 3 can be seen the consumption and production increase followed described. In the same year, Canadian steel consumption reached similar numbers to those of the fertile period of post-war,
around 15 million tons. From the first acquisition of Gerdau in Canada until then, the demand on steel in the country had increased by more than 8%, which the output production decreased by 6.75%. The steel demand on United States had started to increase sustainably in the 90's as well, having in in 1995 reached 112 million tons, a similar number to it's consumption in 1975, before the stagnation on economic development previously debated.

The engagement in its second acquisition in Canada in 1995 may be seen from the perspective of the company leveraging its possibilities of exploring the markets and developing proper growth opportunities, both in the domestic and North American markets. If in Brazil Gerdau would not be able to access fast growth of production capacity by use of acquisition, to exploit its domestic markets in the short-term the company would sacrifice its export possibilities. In such way, increasing facilities abroad could be a solution to sustain exploitation of business opportunities in the three markets, while still decreasing the participation of exports as bridge to clients in North America. With that in mind, the market-seeking driver could be validated, highlighting the interesting fact that by producing abroad company would be able to exploit more efficiently its domestic market increased demand.

The consumption of steel in until 2002 in the three countries had increased in a stronger pace than the production capacity. The U.S. and Canada steel consumption from the first Canadian acquisition, 1989, until 1999 had increased by 22% and 32%, respectively, while the steel output production increased by 9.6% and 5%, respectively. The Brazilian steel consumption in the period increased by 31%, and it's steel output production was almost the same. In this way, the three countries presented market-share growth opportunities. During the period from the first acquisition, 1989, until the consolidation of the North American assets and creation of Gerdau Ameristeel, 2002, the steel consumption in Canada and United States increased by 27% and 16%, respectively, while the production capacity in both countries increased by only 3%. All data can be seen in Table 3.

### 5.1.1 Bypass trade-barrier opportunity-seeking

Regarding exporting being used as a bridge to serve North American markets increased demands from a Brazilian operation, from 1984 the U.S. Government had imposed its first “difficulties” on reaching the markets through exports, as a defense tool to American steel makers. Even thou the implantation of import quotas was established for a period of time of 5 years, the expansion of this plan in 1989 for another 2,5 year may be seen as the first alert that it could turn harder and harder for steel exporters to reach that market with such strategy.

The executive statement that those barriers would “come and go” is a sign of the exposure the company would have to governmental regulation if depended on exports to reach the market. The following years and decade proved that, and in 1999 the import quota was implemented again after series of negotiations between U.S. Government and steel industries parties. Months after the end of
the negotiation that imposed import quotes to Brazilian steel producers, Gerdau made the biggest investment of the studied period, US$472 million, acquiring almost three times the production capacity it had previously purchased in Canada, as it can be seen in Table 5.

If exports were still considered to reach North American markets, the final aggravation of the steel import scenario in U.S. in 2002 certainly influenced the perspective on doing so. The month after U.S. government restricting “Section 201”, March 2002, there was a decrease on 84% on the import in comparison to its previous month, as it can be seen in Table 4. In October of the same year, Gerdau merged its previous acquired units with the American Co-Steel, forming a company in which Gerdau owned 74%. This provided the company instant access to the largest amount of production capacity it had in the period studies, 3,100 thousands of Crude Steel tons, as can be seen in Table 5, demonstrating its commitment to the North American market.

Similar to the example debated in the theory, the business Gerdau is inserted in has a dependency in long-term contracts, here with clients and in the theory from the mobile license Qatar telecom needed (Al-Kaabi, Demirbag and Tatoglu, 2010). Regardless, the legitimacy gain is the same and the efforts to reach them in fastest way in order to be able to exploit opportunities in that market may be supported in Gerdau's case as well.

The intensification in massive investments in production in United States can be seen from the perspective of building a stronger structure to sustain future competitiveness of the company. By investing in production in North America, Gerdau was able to secure the possibility of serving clients in those markets, and also in its home-country domestic one, without being limited to the pressures from the institutional regulative environment. This also validates the idea discussed in the literature review, which stated that companies that had difficulties in transferring products across boarders would have the tendency to invest in production in host-countries (Curvo-Cazurra, 2007).

The stability of the steel production capacity in the markets while the consumption had an strong increase, previously stated, may be a sign of the restructuring that the North American markets were passing through in the period, with strong requirement to increase efficiency in its operations in order to be more competitive with other global steel producers. It seemed that the stagnation of the industry was much more dependent on management side than decrease of consumption. The implantation of import barriers may be the support of such, once it was done because there were steel producers in the world that could provide the market with lower cost steel, and the U.S. steel manufactures were having problems on reaching the similar costs to them. In this sense, the combination of statements of Gerdau's executive that the (1) there were unstable trade-barrier to export to those markets, (2) company wanted to exploit the state of fragmentation the steel sector reached on that period, and (2) company believes it has a superior knowledge on management of steel production assets, lead to the understanding that Gerdau saw in the investment in production in those markets the opportunity to bypass trade barriers into them, and in the restructure of the sector.
the possibility to exploit its management capabilities and consolidate opportunities to gain. Similar to what Luo & Tung statement on the theory.

5.2 Acquisition as Entry-mode choice

The previous experience in acquisition may have played an important role on Gerdau's international entry-mode choice. More than that, it may have played an important role on their choice to go international.

5.2.1 Previous Positive Experience in Acquisitions

Regarding Gerdau's choice for acquisition being related to their previous experience, the following analyze of operational results from domestic acquisitions may clearly present the increase on productivity and financial results on them.

When analyzing the domestic expansion of the company, it can be seen that until its first international acquisition, in Uruguay, Gerdau had engaged in 5 acquisitions. The data from Table 2 on 3 of them, Aço Norte, Guira and COMESA, confirm the increase of the net income of all those after being acquired. In Ac Norte the Net Income was multiplied by 9 in the five years following the acquisition, while the production was multiplied by 3.25, proving the productivity increase. The same can be seen in Guira, where the production doubled, and the net revenue was quintupled. COMESA was acquired with a negative income, (1.7 million US$), and after 5 years had recuperated its operation to a positive net income of 0.7 million US$. If we follow the data on the results of some other acquisitions exemplified in the previous sector, we can see that in all the cases the productivity of the units have increased, being based on the net income over crude steel production ratio. The statement from company's executive that Uruguay's operation had increased operational and financial results from the first years after the acquisition can also validate the positive experience of the company in acquisition.

The executive interviewed states that Gerdau understand as its' core competence the capability developed on managing steel production assets, being it the result of its experience restructuring several operations domestically. By the experience of creating synergies and benchmarks, the company developed its own method of managing its operation, and as the theory states, by having positive result experiences gained confidence in it. This study understands this experience with previous domestic acquisitions as being one side of Gerdau's core competence, and strictly connected to it's choice for acquisition as entry-mode in North American production. It is important to highlight that different than the reality Luo and Tung (2007) approached in Asian EMNCs, Gerdau's core capability is a result of its own experience, not transferred to them from global players in cooperating experiences.
The statement that the company's executive gave regarding its preoccupation in exploiting its knowhow developed over its domestic operations and acquisitions may be connected to the control issue debated in the theory (Madhok, 1997, Hill, Hwang and Kim, 1990, Luo & Tung, 2007). The executive states that the company wants to be in charge of the business decision, applying the strong knowledge it had developed in financial and operational processes, and that was a strong concern when choosing their entry-mode. In this sense, the use of acquisition instead of joint-venture is easily supported, by the idea that Gerdau's core competence is knowledge in the steel production, and to exploit it, company understands it needs authority over its operations. Also, in the resource commitment sphere, the company presented willingness to "buy a problem", by committing its resources when seeing an opportunity to exploit its previously developed knowledge to maximize profit results in foreign markets and augment its managerial capability. In this way, resource-commitment can be seen in Gerdau's case as high, even though company understand the risks related to this commitment as minimized once having high control of the operations. In terms of risk exposure on dissipation of knowledge, the issue regarding control is seen as more important and interesting for the company, minimizing the risk exposure to its knowledge on steel production, and in fact, providing opportunities for the company to develop it even further.

The idea presented on the theory that acquisition experience leads to subsequent choice for acquisition as the international mode (Collins, Holcomb, Certo Hitt & Lester, 2008), can be supported in the case. Also, from the understanding that the increase on financial results previously described can be seen as a positive performance, it can be said that Gerdau repeated its learned behavior, and chose to acquire production first in Uruguay. The executive statement regarding the extremely positive experience regarding operational results may serve also as a validation to their sequence on using it when entered North America, of pursuing possibility of developing similar experience. And in this sense, the knowledge the company have developed on the acquisition processes may be also understood as a point of confidence gained over its operational management capabilities.

**5.2.2 Role of Previous Experience in Acquisitions**

The knowledge on acquisitions and restructuring of processes in those companies was understood as such that can be seen from the perspective of being a key part of the company's core asset, management of steel production assets. As such, Gerdau's engagement in North American production may be analyzed from an additional perspective, as “asset-exploitation” behavior. As supported on the literature, this capability was the result of firms ability to exploit an asset in a more profitable way than other firms, and played an important role in overcoming its liability of foreignness and lack of knowledge about this market (Hymer, 1976). Mainly, because the capability was based on combining previously developed process to the local structure the unit had set, which included local market knowledge, and result in augment knowledge.
With this additional perspective Gerdau's engagement in production in North America goes in line with the theory regarding its dynamic between seeking and exploitation behavior, based on combining capabilities that are outside of the firm with knowledge it already possesses (Madhok, 1997). In this way, the effort to combine its previously developed knowledge in acquisition to the opportunity to bypass trade-barriers and be able to exploit market opportunities in such countries in a more sustainable way, results in acquisition of production in North America.

Even though it cannot be stated that the previous acquisition knowledge by itself triggered the interest in migrating from exports to producing in North America, the confidence on its management process can support that. Gerdau's executive stated that the company understood that could exploit opportunities in those markets if produced there, implemented restructure in operations to reduce their output cost and by that gain profitability. In such way, this perspective confront the idea of Mathews (2006) in which the EMNC would engage in foreign markets to access resources they lack in order to participate in global competition. Combined to the idea that with the 2002 merger, Gerdau passed reached a leading position in long-steel production in North America, and top 15 steel producers in the world, the statement could be reversed: the opportunity of Gerdau to participate in global competition was result of its ability on exploiting an asset, its knowledge, abroad that was already exploited in its domestic markets.
6. Conclusion

About the internationalization of Gerdau, Jorge Gerdau Johannpeter, CEO of the company from 1983 until 2006, stated: "The globalization pulled us outside of our country barriers; there would not be room for growing if we had operated only from Brazil" (Ferreira, 2007).

This study conclusion is that in a moment where the steel sector was facing deep restructure needs, Gerdau was able to see and reach opportunities on it. The engagement in FDI in production in North America was vital not only for the survival of the company, but key to its consolidation as global competitor. In this sense, even thou Gerdau could have reached such markets with limitations through use of exports, by exploiting the acquisition knowledge side of its core competence, the company invested on maintaining its future competitiveness. What was first an strategy to access markets as response to constraints presented by producing in Brazil became a sustainable business structure.

In this way, Gerdau enter the pool of EMNCs that does not reach competitive advantage on country-factors, such as cheaper labor, currency devaluation or access to natural resources. It can be understood that the company success is based on its genuine management capability of transformation of problems in opportunities, mostly by being raised in turbulent economic and political environment. Such characteristic can be seen in many other cases from EMNCs, and this study concludes that besides country-factors exemplified before, the ability to transform problems into opportunities generates in many EMNCs a main competitive advantage.

6.1 Further research proposals

Once the topic of reasons to enter international production and development of capabilities has a subjective nature, the definition of what are those advantages in a company can be generalist and superficially constructed. This research could be further developed by including data from larger number of interviews with executives from the company that had participated in the process, as much as a triangulation of the findings from those interviews to understand possible contrast on opinions.

The understand and delimitation of what are those motivations is crucial to support internationalization strategy. In this way, further examination on how motivations and capabilities of EMNCs interact and their role in their step into international markets can play an important role in improving academic knowledge already available. Specific case-studies instead of general ones would help as well the support for companies outside of internationalized EMNCs outside home-country location-specific factors, very traditional in some emerging regions, such as “nature-resource-based” industries in South America.
References


IBS – Instituto Brasileiro de Siderurgia. (Brazilian Steel Institute), http://www.ibs.org.br, site access in 04/07/2011.


WSA - Word Steel Association , http://www.worldsteel.org/ , site access in 06/07/2011
Appendix

Steel Sector Value Chain

According to the Brazilian Steel Institute (Instituto Brasilerio de Siderurgia, IBS) the development of furnaces that could elevate the temperature to a standard that iron could be melted, during Industrial Revolution, made available the possibility to correct impurities on it, as well as addition of properties that made material more resistant to impact, corrosion and friction. By that, steel was generated, and became 90% of the metals consumed by the industries.

The main raw materials used in the production of steel is the iron ore, mineral and vegetable coal, scrap and electricity. The importance of such materials vary between different types of technologies used in the plants, and the production process can be classified into 2 different unit plants: integrated and mini mills. The first one operates the 3 steps of production, reduction, refining and lamination, using of mineral coal. The second one operates refining and lamination, using pig iron and iron scrap. (IBS, 2011)

Integrated mills promotes the transformation of iron ore into steel products using coke oven, blast furnace, oxygen or electric steelshops and laminators, while mini-mills promotes transformation of iron scrap into steel products, through refining and lamination, skipping the reducing step. There is not use of cole in such mills, because the purification process happens in electric steelshops, using electric energy as its main source, and in the chemical composition perspective, iron scrap already had carbon integrated to it. It is important to highlight that because this mills can produce efficient in lower economy of scale because of not dependence on usage of coke oven and blast furnace, that need high production scale to reach efficiency. The mini-mill competitive scale operation would be 500 thousand ton/year, while the integrated mill would need a minimum capacity of 3 million ton/year. (IBS, 2011)

According to Andrade, Cunha & Gandra, (2000) the high investment need on coke oven and blast furnace acted as entry barrier in the past, and were a restriction to development of internationalization of the industry. From the 1980s, the development of continuous teeming equipment technology, in addition to the usage of electric steelshop, allowed the industry to eliminate the need of intense investment on such a high production scale process, as the integrated mills. It is important to highlight that until the end of the 80s, such technology just created possibility of developing non-long steel products, which made some players skeptical about changing their production technology. With this new technology, the cost of production was highly decreased, and the scale of economy could be reached at a lower quantity of production, rising different market strategies to the firms. Because production could reach scale of economy at a lower quantity level, it became competitive to use such mills to serve specific market demands, and use it in a more flexible way in oscillation of demand. With a more compact structure, decentralization of production became a path to optimize supply chain by bringing closer the consumer market, raw material, and production, reducing costs of transportation.