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Minor Field Study

Does integration matter for FDI?

The Case of the Car Industry in MERCOSUL

A Minor Field Study

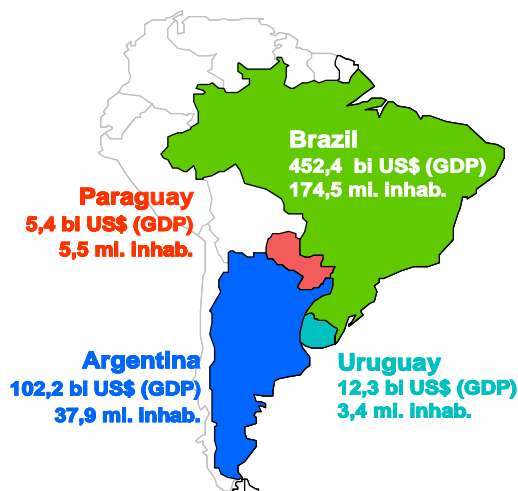
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ABSTRACT

This thesis evaluates what impact the regionally integrated area of MERCOSUL has had on the investment flows in the automotive industry in Argentina and Brazil. The analysis is based on the theoretical framework on FDI and regional integration developed by Blomström & Kokko and interviews with MNCs in the region. We discuss what the motives have been for the automotive industry to locate in the region and how the production strategies have changed since MERCOSUL was created in the beginning of the 90s. In the end of the analysis we discuss how the degree of liberalization and locational advantages in Argentina and Brazil has changed with MERCOSUL.

We come to the conclusion that MERCOSUL has not been a key factor in the MNCs investment decisions. We also realize that the reality of why companies invest in RIAs is far more complicated than in theory and therefore it is hard to evaluate MERCOSUL's effect on the FDI-flows in the region.

Keywords: MERCOSUL, FDI, Automotive sector, Regional integration, Brazil, Argentina



GDP: +/- 572,3 billion US\$ (2002)
Population: 222 million inh.
Area: 11.883.000 Km2

Sources: World Bank Group

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ABBREVIATIONS

ANFAVEA	Associação Nacional dos Fabricantes de Veículos Automotores
CBU-truck	A CKD where the gearbox and transmission have been put in place.
CKD	Completely Knocked Down vehicle. All the parts for the vehicles are produced in different factories. From there they are shipped to an assembly plant where the final product is put together.
EOS	Export-oriented strategy
FDI	Foreign Direct Investment
FINAME	Financiamentos a Máquinas e Equipamentos
HDV	Heavy Duty Vehicle (heavy trucks)
ISS	Import-substitution strategy
LCV	Light Commercial Vehicle, like vans and pick-ups.
MERCOSUL	Mercado Comum do Sul
MNC	Multinational Company
RIA	Regionally Integrated Area
RTA	Regional Trade Agreement
Sindipecas	Sindicato Nacional da Indústria de Componentes para Veículos Automotores (Brazilian Association of Autoparts Manufacturers)

1. INTRODUCTION

During the 1950s, a large number of South American countries started to promote import-substituting industrialization. The purpose was to discourage imports in order to stimulate domestic production. However, as investments declined so did wealth and stability. This strategy was in effect during the 50s and 60s. At the end of the 1970s, governments shifted away from import-substitution and adopted an outward looking policy, with export led growth. The strategy encouraged product diversification and export. These strategy changes were due to failures of import-substitution and the installation of democracy in countries like Argentina. The beginning of the 1990s was the start of a new period for South America. With regional integration flourishing across the world, South American countries could not afford to stand by themselves. Therefore, the Southern Cone Common Market, MERCOSUL¹, was created. MERCOSUL is a Regionally Integrated Area (RIA) the four South American countries Brazil, Argentina, Paraguay and Uruguay.

1.1 Purpose

Since the start of the MERCOSUL project in the beginning of the 1990s, Foreign Direct Investments have increased sharply. In the auto sector, many companies that were located in the area decided to make new investments, and new firms entered the industry. *The purpose of this study is to try to see what effects the creation of MERCOSUL has had and will have on Foreign Direct Investments in the auto industry.* We aim to investigate how attractive the MERCOSUL region is for investors in this industry. What are and have been the motives for MNCs to invest in the area?

To outline the effects that the creation of MERCOSUL has had on the automotive sector, we aim to study the production changes. As intra-trade barriers have become lower, the market size bigger and the competition is assumed to have increased, there should be

¹ MERCOSUL is the Brazilian name; the more common is MERCOSUR, which is the Spanish name.

effects on the FDI-flows in production. How have the MNCs' strategies changed since the creation of the RIA?

1.2 Outline of the study

This paper consists of six chapters. The introduction is followed by a presentation of MERCOSUL and the trade barriers in the auto industry. The third chapter presents the theoretical framework with the relationship between FDI and regional integration. In the fourth chapter we apply our theoretical framework to the auto industry in MERCOSUL and the questions posed in the introduction will be analyzed. Chapter five consists of case studies of different MNC vehicle manufacturers. Some of these we have been able to interview. In the final chapter we sum up the results and speculate on what the future holds for the auto sector in MERCOSUL.

1.3 Why study regional integration & FDI?

Regional integration projects, such as MERCOSUL, have been seen by participants as necessary components of development and essential for managing the economic challenges that come with globalization.²

In the 1990s, FDI became the largest single source of external finance for developing countries. In the past, governments often saw MNCs as part of the developing problem as they exploited the environment and the labour force. Now, MNCs are seen as part of the solution of the developing problem. This for several reasons: First, governments acknowledge that they need outside capital to achieve development. Second, export-oriented FDI brings relief from foreign exchange shortages. Third, FDI is more stable than portfolio investments. Fourth, host-country governments recognize that MNCs have access to other resources than capital.³ FDI is a way to transfer production technology,

² Mecham, 2003: 372

³ Mixon & Treviño, 2004:233

skills, innovative capacity and organizational practices to developing countries and give them access to international marketing networks.⁴

If we can conclude that MERCOSUL contributes to the attraction of the multinational companies' investment decisions it would imply that RIAs is a way for developing countries to experience economic growth.

1.4 Why study the auto industry?

To analyse the auto industry is interesting for several reasons. Firstly, the fact that there are no domestic firms acting on the market makes the countries even more dependent on Foreign Direct Investments. Secondly, the sector is an important contributor to the countries' economies. The auto sector contributes to 36% of the FDI-flows in MERCOSUL.⁵ Thirdly, the auto sector generates a long supply chain and thus creates employment opportunities for a lot of people.

These factors together explain why the auto industry has become a very sensitive subject in MERCOSUL-negotiations. Even to this day vehicles are not part of a free trade agreement, partly because of fears of what a regional free trade would imply for the investment flows and employment.

1.5 Analyzing objectives and interviews

To find information about investments and production strategies in MERCOSUL we have chosen to focus on the nine biggest auto firms located in Argentina and Brazil. These are Volkswagen, General Motors, Fiat, Ford, PSA Peugeot Citroën, Renault, DaimlerChrysler, Toyota and Scania. As Volvo is the only producer that is solely located in Brazil, we have chosen to study that company as well, and see if this shows a different strategy and thus a different view on MERCOSUL. The focus is on the four firms that we have conducted interviews with.

⁴ Mallampally & Sauvart, 1999.

⁵ www.mercosul.gov.br

Our empirical studies are based on interviews with four of the car and truck manufacturers, and on other material about the firms gathered from their web sites and through interviews with other actors. The companies interviewed are the truck and bus manufacturers Volvo do Brasil and Scania as well as the car assemblers General Motors and Renault/Nissan.⁶ The reasons for studying these assemblers are to encompass both the truck and the car section and in that way get a broader picture of the industry. We had wished to interview representatives from more companies, but it was difficult to find people who could give us the time to perform interviews. We are aware that with such few companies it is difficult to draw general conclusions about the industry.

When doing interviews with these assemblers, almost identical questions have been posed in order to compare the companies in the best possible way. At each firm, one person was interviewed, except from Volvo, where we interviewed two. At Scania and Renault/Nissan we interviewed the production managers and at GM the link dealing with governmental issues. At Volvo we interviewed the production manager and a person dealing with governmental issues. The interviews took place in Curitiba and Sao Paulo, in the middle of November 2004. Even though solely done in Brazil, we were able to receive relevant information about the Argentinian production as the companies have a MERCOSUL-perspective.

In order to get a better insight into how the industry works we also conducted interviews with ANFAVEA and Sindipeças. ANFAVEA is an organization whose purpose is to represent the producers in the automotive vehicle industry and participate in negotiations with the government and its associated bodies.⁷ Sindipeças has the same function for the auto part industry. These interviews gave a good overall picture of the industry as the suppliers cannot be forgotten when dealing with the auto industry.

⁶ Renault manufactures some Nissan cars in the plant in Sao José dos Pinhais, Brazil.

⁷ ANFAVEA, 2004

2. MERCOSUL and the automotive sector

In this chapter we will introduce the reader to the regional integration of MERCOSUL. Firstly, the main objectives of the RIA will be presented and how it has developed. After that follows a description of its trade policy regarding the automotive sector.

2.1 The main objectives of MERCOSUL

MERCOSUL has already come a long way in the integration process. To continue the development and improvement of the RIA, MERCOSUL has identified important objectives, namely⁸;

- Improve the international negotiating power of its members
- Create a common market without intra-trade barriers
- Harmonize technical rules and rules of origin
- Improve competitiveness of the bloc and promote sustainable growth
- To be a political and economic union

2.2 The establishing of MERCOSUL

In figure 2.1, the development of MERCOSUL is illustrated. In the time line, important steps in the MERCOSUL integration process are shown, as well as other important events that have affected the development of the RIA. The text below will describe these events in detail.

MERCOSUL represents the fourth largest economic entity world-wide and has more than 200 million consumers.⁹ In 1984 the negotiations for MERCOSUL began and two years later Brazil and Argentina signed a bilateral agreement which formed the start of an economic and political cooperation. The agreement stipulated the elimination of trade barriers over a period of ten years. In 1988 this agreement was taken one step further, the

⁸ Ogliari, 2004

⁹ www.mercosul.gov.br

creation of a common market. The impact made it difficult for the smaller countries Uruguay and Paraguay to stay out. In 1991, the “Treaty of Asuncion” was signed by Argentina, Brazil, Uruguay and Paraguay and was based on the bilateral agreement of Argentina and Brazil, with the purpose of creating the Southern Cone Common Market known as MERCOSUL. The treaty stipulated that the four countries were committed to the establishment of a free trade area during a transition period, between 1991 and 1994, to ultimately create a common market. The common market aimed to facilitate the free movement of goods, factors of production and services, and the elimination of custom duties and non-tariff restrictions. Its purpose was also to coordinate macroeconomic and sectorial policies between states to ensure proper competition. This involved standardizing many trade related rules, and harmonizing the members’ economic policies. The instruments in play were the trade liberalization program which consisted of progressive, linear and automatic tariff reductions. The common external tariff (CET) was up to 20% against non-member countries. However there were product groups with exemptions, such as telecommunications and computer equipment. Brazil had 29 goods not subject to tariff reductions and Uruguay had 950. In addition to these exemptions, the automotive and sugar sectors were not included at all due to substantial divergences between the countries national policies; especially between Brazil and Argentina.¹⁰

With the signing of the Ouro Preto Protocol in 1994, the integration process of creating a customs union started. From January 1995 a CET was set at 11 levels, from zero to 20%.¹¹ However, as there are many exemptions, the Customs Union is still not fully in force.¹²

During the 10th anniversary summit in December of 2004, the economic president of Argentina, Robert Lavagna, said that he wanted to postpone the free trade agreement until after 2010. He, among others, claimed that it is necessary for Argentina to recover

¹⁰ Hashmi, 2000: 42

¹¹ Hashmi, 200:42

¹² www.mercosul.gov.br

and that both countries are in an economical upturn for further deepening the integration.¹³

2.3 Trade policy in the automotive sector

2.3.1 The Automotive Regime in Brazil

After the creation of MERCOSUL, there were intentions to create a common regime for the auto sector. Until this was implemented the countries maintained their own policies. In 1995, Brazil introduced the “New Automotive Regime” as a way to keep the large companies in the country.¹⁴ The regime protected the industry with high tariffs (70%) and quantitative restrictions. This triggered one of the most serious diplomatic conflicts within MERCOSUL¹⁵ as it also excluded the Argentinian auto industry. Nevertheless, the Argentinean exports only constituted of 5% of the total imports to Brazil and were hardly damaging the Brazilian auto sector. The real issue was the new trade regulations for automobiles under MERCOSUL. In that trade regulation, Brazil felt that Argentina was favoured as it could demand that carmakers exported as much as they imported. This meant a unilateral opening up of its market to Argentina.¹⁶ In the end the crisis was resolved by the political intervention of both countries’ presidents. Brazil was to exempt MERCOSUL-made cars by the year 2000, and firms with plants in both countries had to balance their trade by the same year. Firms with plants only in Argentina were allowed to have a quota for exports to Brazil at 35% tariff.¹⁷ However, this dispute was not solved in 2000 and now the goal is to reach completely free trade by 2006.

¹³ Marquesini, 2004

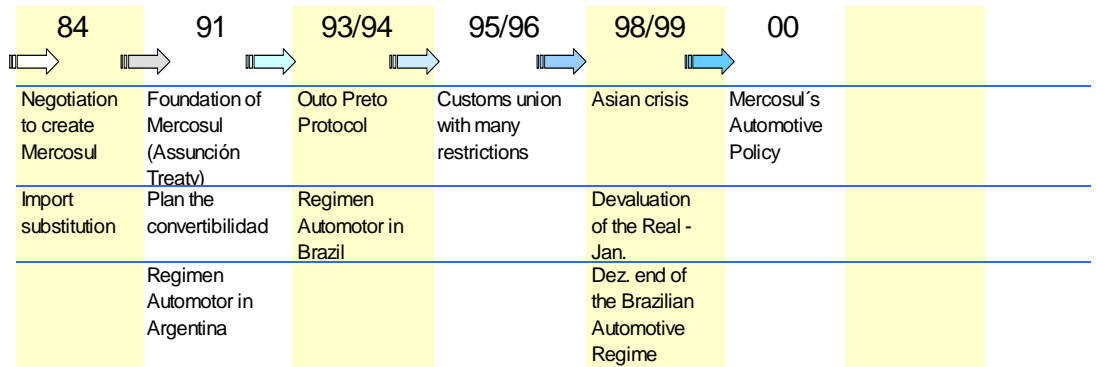
¹⁴ Arbix, 2001:134

¹⁵ Gomez 2002

¹⁶ Cason 2000

¹⁷ Haashmi: 2000: 44

Figure 2.1: Development of MERCOSUL



Source: World Bank, 2004

2.3.2 PAM

Even today, the automobile conflict between Brazil and Argentina is not solved and the auto sector is not included in the free trade agreement. Therefore, MERCOSUL introduced its own policy called PAM; the Common Automotive Policy. This policy stated that from 2001 to 2005, a transition period will be in effect. Completely free trade was to be in place by 2006, but the Argentinian government has announced that they will postpone the agreement until after 2010.¹⁸

Trade barriers are governmental policies that are directed to restrict imports or promote exports. The two main motives for them are to improve the trade balance and to protect the local industry from outside competitors.¹⁹ The trade barriers in PAM are both tariff barriers and non-tariff barriers.

Tariff Barriers in PAM

In trade with the outside world, the tariff rate on imported cars is the same in Argentina and Brazil; 35%. In Uruguay and Paraguay the tariff is lower. In Uruguay they have a

¹⁸ Ogliari, 2004

¹⁹ Benito & Gireva, 2003:56

tariff of 23% and it will remain. Paraguay has to raise its tariff gradually from 10 to 20%. When it comes to trucks and buses, Argentina and Brazil have agreed on a common tariff, but currently Argentina has a tariff rate slightly lower than the common goal, 35%. Even in this sector Paraguay and Uruguay need to increase their levels to 20%.²⁰

A CET is aimed for in auto parts. For auto parts the tariffs have a different structure and are divided into three classifications depending on the type of product:

14% on steel and other unprocessed material.

16% on individual components which are forged and processed like shafts.

18% on finished products like steering wheels, gearboxes.²¹

All countries except Paraguay, which has a different system, have currently reached these levels.

Non-Tariff Barriers in PAM

Sectorial Balance Control

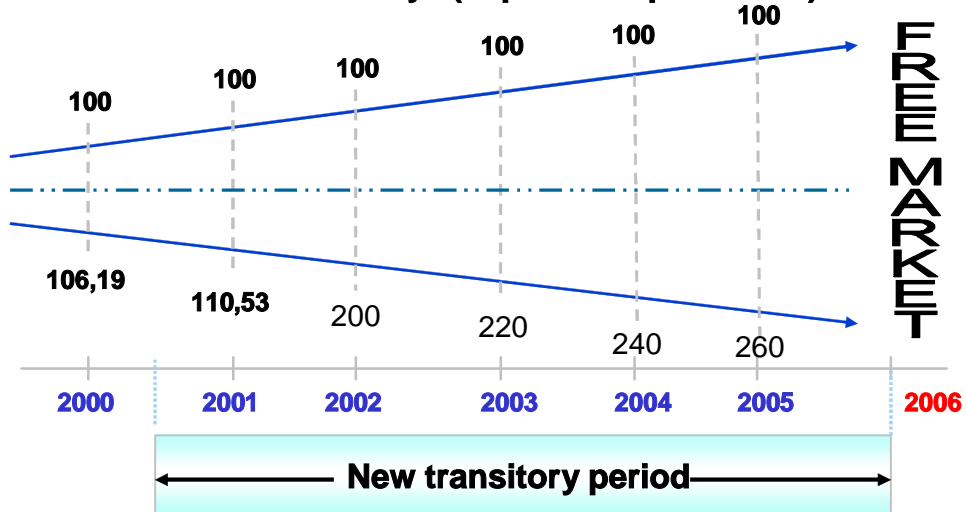
At intra-trade level between Argentina and Brazil there are still trade barriers, but now the restrictions are quotas, not tariffs. It is called “the Sectorial Trade Balance Control” where for every \$2.4 of exports from Brazil to Argentina, Brazil has to import \$1 from Argentina. Worth mentioning is that this applies to the country as a whole and not to a specific company. As seen in figure 2.2, these quotas are planned to increase until 2006 when the sector is supposed to become free from trade restrictions.

²⁰ Ogliari, 2004

²¹ Pereira, 2004

Figure2.2

Automotive trade balance “flexibility” (Import X Export - US\$):



Source: Ogliari, 2004

Rules of origin

In a vehicle, at least 60% of the parts have to originate from the regional market in order to benefit from free access to the other MERCOSUL countries. This applies to Brazil and Argentina, whereas Uruguay only needs 50%. When it comes to newly produced cars, in the first year of production the regional content requirement is only 40%. The second year of production it is increased to 50%. The reason for this policy is that it might be difficult for the car companies to find suppliers that can provide them with the new parts. There are many reasons for the implementation of a higher degree of local content:

1. Financing of sales through FINAME (see below)
2. Decrease costs by avoiding import-tariffs, insurance costs and freight costs related to the import activities.
3. Decreased exposure to exchange rate.²²

FINAME

In Brazil there is a financing system which is offered by the Brazilian Development Bank (BNDES) called FINAME. The reason for creating this program is that Brazil is a

²² Report, 2004:4

country with high interest rates and borrowing money is expensive. FINAME offers subsidized interest rates to consumers and companies that buy a vehicle accepted for FINAME-financing. In order for the companies to be allowed to offer a FINAME financed car on the market, the cars have to have at least 60% of local content. As the consumer is probably more prone to buying a car with a lower interest rate, this loan is very important for the MNCs to stay in the market and be able to keep sales at a certain level.²³ FINAME is therefore working as a rule of origin as it forces companies to use regionally produced parts.

Export-promotion strategy

Drawback

If an auto part is imported to Brazil and is to be used in a finished product aimed for export, the import tax will be repaid retroactively. This is a way for the Brazilian government to stimulate exports. It should be mentioned that this strategy is only used by Brazil. The drawback is a good method not only to promote exports but also to decrease the MNCs' resistance to the trade barriers and thus keep their domestic auto part industry. Furthermore, if Argentina does not introduce a similar policy, the MNCs will be eager to use Brazil as an export-base. However, the disadvantage with this export-promotion is that the importer has to pay at the time of entrance and it is not always clear if the auto part is intended for exports. Therefore, companies are not always able to take advantage of the drawback system. Nevertheless, this system should be changed in January 2005 and the payment of import taxes should be delayed until the finished product is sold.²⁴

2.4 Summary

Currently MERCOSUL is classified as a Customs Union with many exemptions. The auto sector is not included in this agreement and therefore the MERCOSUL-countries have created a specific auto policy; PAM. Together, they have devised the Sectorial Balance Control which gives the countries practically free trade as long as the regional

²³ Benito, Gireva, 2003: 59

²⁴ Report, 2004:4

content requirement is fulfilled. According to PAM the auto sector should have had free trade by 2006. However, Argentina is struggling with its economic recovery, so free trade negotiations have been postponed for a couple of years.

3. REGIONAL INTEGRATION AND FDI

This study is based on theories of investment, mainly the models used by Blomström & Kokko in their article “Regional Integration and Foreign Direct Investment” from 1997. To get an easy view of the most important aspects to consider when studying FDI in MERCOSUL we have created a simplistic overview of the theory.

3.1 Definition of FDI-flows and production strategies

In the thesis we examine the Multinational Companies’ investments in the automotive industry in MERCOSUL. To achieve this we look at the investment flows and the strategies undertaken by the companies. Therefore we need a way to define and measure Foreign Direct Investment, and give a definition of what production strategies are.

Blomström & Kokko define Foreign Direct Investment as: “[...] foreign ownership of a controlling share operating in a country’s domestic market”. The FDI-flows in the study are limited to the auto sector, which come through the international car manufacturers making investments in the MERCOSUL-countries. These investments are shown through the production strategies in the following ways:

1. Setting up or taking away plants in the region.
2. Starting production of new models.
3. Increasing the production rate in the plants.
4. Modernizing or restructuring existing plants.
5. Rationalizing by reallocating production.

3.2 Motives for FDI

There are two main motives for companies to locate in a country or region:

1. **Tariff-jumping** (Horizontal FDI). When the trade barriers in a country or region are very high, it might be more profitable for a MNC to start up a business within

the country itself than to serve the market through exports.²⁵ Investments with this motive of serving the market are also called horizontal FDI and this market-seeking investment is a way to replace trade.²⁶ Market-seeking FDI became the predominate motive for investing in the developing countries in the 60s and 70s, when the import-substitution strategy was at its peak.²⁷

2. **Efficiency-seeking** (Vertical FDI). By locating in another country or region, a company can get access to cheaper inputs than in the home country²⁸ and use it as an export base. This is also called vertical FDI as it helps MNCs to reach the most cost-effective chain of production.²⁹ The main motive is therefore not to supply the foreign market but instead a part of the global production chain.

3.3 Attraction of FDI to the RIA

To illustrate the relationship between FDI and regional integration, we use the matrix constructed by Blomström & Kokko and Figure 3.1 demonstrates the potential success of the RIA. In order to determine the level of liberalization we need to look at the institutional changes that have occurred since the creation of the RIA. Liberalization changes summarize the degree to which trade and investment flows are liberalized by the integration agreement.

²⁵ Blomström & Kokko, 1997:2-3

²⁶ UNCTAD 2, 2000:49

²⁷ UNCTAD 2, 2000:3.

²⁸ UNCTAD 2, 2000:4

²⁹ UNCTAD 2, 2000:50.

Figure 3.1: The Blomström & Kokko matrix

	Locational Advantage Positive → Negative	
Liberalization Strong ↓ Weak	1	2
	3	4

Source: Blomström & Kokko, 1997: 14

The locational advantage depends on the degree to which it is profitable to locate an economic activity in a particular location. This includes the advantage of and cost of various production factors as well as the general macroeconomic environment.³⁰ The categorization includes market size, macroeconomic situation and access to inputs.

The theory could be applied to two different scenarios. The first is to compare two countries within the RIA and the other is to look at the RIA as a whole entity compared to the outside world. This is the manner in which we will use the theory from now on.

Area 1: The most positive impact on investments would presumably occur in area 1 in figure 3.1. These activities experience the strongest degree of integration and have a strong locational advantage. This area is the target for every RIA to reach as it would generate relatively strong, positive capital flows from both foreign and domestic investors.

Area 2: In this sector, the RIA or the country has achieved a strong liberalization of trade policy with a well developed institutional framework. However, the locational advantage is weak due to disadvantages of macro economics, market size or access to cheap inputs.

Area 3: The RIA has a good locational advantage as its macroeconomic environment is stable, the market size attracts investments and is competitive when it comes to inputs. The RIA has a problem with a restrictive trade policy and asymmetrical legal framework, which could discourage investors.

³⁰ Blomström & Kokko, 1997:14-15

Area 4: This is the least developed, and therefore the least attractive RIA or country. Neither the liberalization nor the location is advantageous for investments.³¹

3.4.1 What decides the attractiveness of liberalization?

Liberalization applied to country level

As mentioned, the degree of liberalization depends on the institutional changes, such as trade liberalization, as a way to attract FDI. Governments can relax rules for the market by improving the standard of treatment of foreign firms; facilitate business and create investment incentives which make the market more attractive for investors.³² It is also important for developing countries to make the rules and regulations more transparent for facilitating business in the country. However, the stability of government in the country is also essential to get credibility for the policies. If there is a risk that the host country government will unexpectedly change the institutional environment, the country becomes less appealing to foreign investors.³³

Liberalization applied to the RIA

The institutional environment in the RIA is also important for attracting new investors. It is important that the integration has credibility. Investors might fear that purely national reforms are temporary and can change with a regime shift.³⁴ In order to create a pleasant environment for investors, the legal framework has to be evolved and harmonized between the countries. It is also important to treat foreign and regional firms equally and provide strong and similar property rights in order to encourage inward direct investments and reduce investment risks.

³¹ Blomström & Kokko, 1997:15

³² Mallampally & Sauvant, 1999

³³ Mixon & Treviño, 2004:236

³⁴ Blomström & Kokko 1997:9

3.4.2 What decides the locational advantages?

Locational advantage applied to country level

1. **Macroeconomic situation.** For developing countries to compete for FDI they must implement macroeconomic policies designed to reduce inflation, stabilize the exchange rate and increase GDP. A high rate of inflation is a sign of economic instability and creates uncertainty regarding the present value of long-term investments. A constant real exchange rate is preferred by MNCs in order to reduce the exchange rate risk inherent with investments in a foreign country.³⁵ GDP is important for market and demand growth. For vehicles the demand goes hand in hand with the GDP growth. If you have GDP growth of 2%, the market will remain unchanged. However, if it is larger than 2% the market will grow.³⁶ According to Kokko & Blomström the macroeconomic stabilization will be of greater importance than the regional integration agreement itself when it comes to FDI inflows.³⁷
2. **Market size.** The size of the domestic market in the foreign country is an important determinant of FDI. In 1994, UNCTAD stated that market size was the primary decisive factor. The importance in a great market lies in the possibility for MNCs to reach economies of scale in production.³⁸
3. **Access to inputs.** A foreign market can attract investors with a good possibility of obtaining cheaper or better inputs. These locational advantages could be access to cheap suppliers, low cost labour, access to a skilled and educated workforce and access to natural resources.

The locational advantage applied to the RIA

It is important for each country within the RIA to improve its locational advantage in terms of a stable macroeconomic environment, access to inputs and markets size.

³⁵ Mixon & Treviño, 2004:236

³⁶ Nielsen, 2004

³⁷ Blomström & Kokko 1997:24

³⁸ Mixon & Treviño, 2004:236

However, in order for the whole region to be attractive, all countries within the RIA have to be in the same economic stage for the integration to proceed. With the same macroeconomic status, it is easier for the regional integration to decide upon a common policy framework to handle external and internal shocks. With the RIA comes a greater internal market, which improves the market-size and the access to inputs. For this to have effect, both non-tariff and tariff barriers must be completely erased in the intra-trade. When trade barriers are eliminated, the competition increases. This could improve the RIA's comparative advantage, and thus make it more attractive for FDI. The improvement of the locational advantage will bring positive effects to the integration process and we end up in area 1 of the matrix in figure 3.1.

What happens to investments within the RIA?

Liberalization and locational advantages affect the investments in the RIA, but a lot also depends on the motive for the FDI. This in turn affects the production strategies of the MNCs. If FDI has a tariff-jumping argument, the creation of the RIA could affect the MNCs' strategies. Firstly, if the intra-regional tariff is eliminated the tariff-jumping argument no longer is valid within the RIA. All of a sudden it is not necessary for the MNCs to be located in both countries as there is a regional market instead of a domestic. This could change the companies' production strategies and one of the countries might lose investments to the one with the locational advantages.³⁹ Secondly, if the external tariff is lowered, the region is more liberalized and the investments motivated by tariff-jumping will disappear. The companies can close down their production and provide the market through imports from a more efficient producer. Therefore, the locational advantages of the RIA decide whether the companies are going to close down production or remain in the region.⁴⁰

The main purpose for creating a RIA is to create a win-win situation for the countries. The success depends on the degree of liberalization and the locational advantage. If the

³⁹ Blomström & Kokko 1997:2-3

⁴⁰ Blomström & Kokko 1997:6

FDI is vertically motivated, the RIA makes the market more attractive. However, there are some risks in terms of losses of FDI. When companies in the market have to become more competitive, rationalisation is needed and the larger market makes the company able to take advantage of economies of scale. This cost reducing strategy implies that it is no longer necessary to have the same production in two countries within the region, manufacturing the same product. Instead, the company may choose to produce in the area which has the best locational and liberalization advantages.⁴¹

⁴¹ Blomström & Kokko 1997: 6,9

4. FDI & THE AUTO SECTOR IN MERCOSUL

In this chapter, the theoretical framework will be applied to the empirical case of the automotive industry in MERCOSUL.

4.1 The locational advantage of MERCOSUL

4.1.1 Macroeconomic situation

At the start of MERCOSUL, the macroeconomic situation looked hopeful, with the real plan stabilizing the inflation in Brazil. Argentina experienced long term growth and the peso was also pegged to the dollar. The two countries were at this point on the same macroeconomic level and the integration process went relatively smoothly. However, with the “tequila effect”, the Real devaluation, the Asian financial crisis and the Argentinean crisis, the process experienced setbacks.⁴² The crisis in Argentina made the production of cars drop from 340,000 units in the year 2000 to 159,000 units in year 2002.⁴³

The South American market is known for its great volatility and with the quite unexpected crisis in Argentina showed that this trend seems to be continuing. In the 90s, many companies saw a great future for Argentina, with its stable growth and increase in GDP. Many companies made new investments. After the crisis, MNCs reduced investments in the country and Fiat even chose to stop all production in the Argentinian plant. Argentina’s bad macro economic situation, with huge government debt has been a bad signal for investors.⁴⁴ However, Argentina is recovering faster than many had

⁴² Gazel & Paiva, 2003; 125-127

⁴³ ANFAVEA, 2004: 147

⁴⁴ Nazario, 2004

anticipated. For 2004 the expected GDP-growth was almost 7-7.5%, although less for 2005.⁴⁵

For Brazil, the situation is different. In the 90s, there was a great expectation of the growth of the vehicle demand, with a great belief in a three million market. With the devaluation, and the worsening of the macroeconomic environment that followed, this number was never reached. However, Brazil has improved its situation and is therefore in a completely different state from Argentina. Inflation is still high, but according to Marquesini, Brazil is leaving the risky market for investments and has an annual GDP growth of 3.5%. By 2007 he believes the country will reach a level of stable growth which means that they will no longer have financing from the IMF.⁴⁶ Therefore, it is apparent that Brazil is more attractive as a host for new investments.

To relate to the theoretical framework, these facts show that Argentina and Brazil are currently in different areas in the matrix in 3.1 when it comes to macroeconomic environment. Brazil has reached a fairly stable economical stage and is therefore located in area 1 or 3. Argentina on the other hand, is recovering from the crisis and must have a weaker locational advantage and therefore located in area 2 or 4. Worth mentioning is that Argentina was in a better macroeconomic stage when the big investments were made in the beginning of the 90s.

Concerning the macroeconomic disparities, the RIA's locational advantage is facing problems. With the situation today, Argentina is concerned that they will lose investors to Brazil without protection of their industry. Thus it is essential to achieve macroeconomic harmonization for the advancement of the integration process. If the MERCOSUL-countries are to have a harmonized macro economy, major financial crisis are likely to require similar policy responses, without the need for unilateral change in tariff or other trade policy instruments. Today the countries are in different economical stages.

⁴⁵ Autodata, 2004:110

⁴⁶ Marquesini, 2004

Therefore the lack of harmonization makes it very difficult and complicated to create a policy that responds to external shocks and is suitable for all member countries. Currently the governments have tendencies to raise tariffs and NTBs to trade when facing balance-of-payment problems. These setbacks in the integration process create tension between the governments and can seriously damage the credibility of the process. According to de Paola, the real difficulty for the integration process lies in the macroeconomic differences. Without macro harmonization it is very hard to negotiate harmonization laws in other areas.⁴⁷

4.1.2 Market size

The auto market in MERCOSUL is relatively small compared to other markets like NAFTA, where the number of cars sold is around 17 million units per year, compared to MERCOSUL's 2 million units. None of the companies interviewed really considered the size when investing. For the region to be able to attract investments with its market size, agreements with other countries and trading blocs like Chile and the Andean Community (Venezuela, Peru, Bolivia and Colombia) become essential. Today MERCOSUL is negotiating an agreement with the EU. This could greatly improve the attractiveness of the integration and augment the exports of vehicles. An agreement with Mexico has been reached for cars, where the tariff is meant to be eliminated in the coming years. This could be very important for attracting new investors to MERCOSUL and for the region to be used as a base for exports, reaching a bigger market.

For a country like Brazil, the internal market has not changed that much since MERCOSUL. From this perspective, it can be argued that Brazil has the least to gain. At the same time, since as it is the dominant market, it is likely that it will have the most power in ongoing negotiations. The other countries are more dependent on having access to the greater Brazilian market and are therefore not as influential. For Brazil, agreements with other blocs are important in order to take advantage of its production and achieving economies of scale.

⁴⁷ de Paola, 2004

Compared to Brazil, the Argentinian market is much smaller. This could explain why Argentina is the country hesitating the most in continued deepening of the trade agreement in the auto sector. Brazil, with its bigger domestic market, would absorb all production. Surprisingly, this argument has been contradicted by the auto industry itself. According to the companies, they are not planning to leave Argentina, even if free trade is reached. This belief is strengthened by the fact that companies like PSA Peugeot Citroën, Volkswagen and GM are planning to increase production in the coming years and Fiat is planning to start producing in Argentina again.⁴⁸

Pereira from Sindipeças wonders how it is possible for companies to have plants in both countries with such a small regional market. However, with specialization and increased exports, he believes the turnover for each company would increase, attracting more investments.⁴⁹ Another reason for staying in both countries might be politics. The Argentinean president, Nestor Kirchner has been indicating to the companies that he appreciates the investments in the country by visiting the plants.⁵⁰ This proves that Argentina is keen to maintain the industry in the country.

As politics play an important role when it comes to investment, Tissier mentioned another situation to explain why there has to be production in both countries. If Argentina is to have an interest in protecting the MERCOSUL car industry it must have its own production to protect. If not, it would have nothing to gain by having a tariff to the outside world, as this would imply trade diversion. Instead they would push for a trade creation, importing from the cheapest country. This would harm the exporting market of Brazil and dissolve MERCOSUL. Thus, it is an incentive for Brazil to have patience with Argentina and to come to an agreement⁵¹ where both maintain their auto industry.

⁴⁸ Autodata, 2004:106

⁴⁹ Pereira, 2004

⁵⁰ Autodata, 104-110

⁵¹ Tissier, 2004

To summarize, Brazil has the larger market and this has been a crucial factor when deciding the location for investments. However, the purchasing power of the market could improve even more seeing that today there only is one car per ten people. The expansion of demand depends on how the macroeconomic situation evolves. This prospect can strengthen the belief that it is and will be in area 1 or 3. Argentina was an economy with great potential before, which compensated for the small market. Today the Argentinian economy is recovering from the recession and the small market has become more apparent, therefore it has weaker locational advantages. This can be an argument for Argentina to be located in area 2 or 4. When looking from a RIA-perspective, the market size has increased, but compared to other regional integrations such as NAFTA and EU it is still relatively small. However, as a trading bloc amongst developing countries, MERCOSUL is one of the biggest. Depending on which of the two comparisons you choose to make, MERCOSUL can be positioned differently in the matrix.

4.1.3 Access to inputs

MERCOSUL can be competitive only if the infrastructure is improved, taxes are reduced and labor laws less rigid. Without taxes, not even China could produce at as low cost as MERCOSUL.⁵² This section will focus on Brazil as the information about Argentina is limited.

According to Marquesini, Brazil has a comparative advantage in raw materials and components⁵³ and Nazario states that the Brazilian auto sector is competitive when it comes to technology.⁵⁴ In this sense, Brazil does not need to protect the market with high tariffs. Bentancourt claims that the protection is more a way for the governments to get tax revenue and that is what they have to protect.⁵⁵ According to Wollter, this way of

⁵² Bentancourt, 2004

⁵³ Marquesini, 2004

⁵⁴ Nazario, 2004

⁵⁵ Bentancourt, 2004

financing the government is very important for Brazil.⁵⁶ Despite Brazil's abundant natural resources, the country has a problem when it comes to the transportation network and supplying these inputs to other regions. Transport and communication services have been suffering from a lack of public investment. This harms the international competitiveness of the country and thus the locational advantage.⁵⁷ In addition, there is an obstacle to increased production as the capacity of the supplier network is at its maximum. Therefore new investments have to be made in the auto part sector to improve the locational advantage.⁵⁸

A very important advantage is the cost of labour, which is much lower in Brazil than in Europe. Therefore, all products that are labour-intensive are suitable to produce locally.⁵⁹ Even though the labour costs are low in Brazil, the country has to maintain this comparative advantage. The new EU-members have advantages as they are closer to Europe and have low labour costs.⁶⁰ Other emerging markets that could threaten Brazil are China and India. If you take away the relatively high taxes from labour, Brazil would be very competitive against the outside world and this would be a positive locational advantage in area 1 or 3. However, with the taxes this situation is weakened and this comparative advantage can be lost.

Overall, the access to cheap inputs was not as important for the RIA as we had expected. Most companies had a tariff-jumping motive when investing. As the tariff levels were high, the access to cheap inputs did not matter for the investment decisions. As the domestic currencies were highly overvalued at the time, exports were not considered. This strengthens the belief that the investments made were market-seeking. However, since the devaluation of the Peso and Real, the export opportunities have increased. The depreciation in itself has created a comparative advantage for MERCOSUL, which makes

⁵⁶ Wollter, 2004

⁵⁷ Report, 2004:6

⁵⁸ Autodata, 2004

⁵⁹ Report, 2004:10

⁶⁰ Nielsen, 2004

the region more attractive as an export base and the access to inputs a decisive factor. In the matrix the exchange rate is crucial for determining the locational advantage.

4.1.4 Institutional situation

Intra-regional trade has gradually been liberalized in Argentina and Brazil since the early 90s when both countries went from an ISS to an EOS. Today, Brazil has a well developed legal framework for the commercial relationship to foreign countries. The Brazilian reforms were made during the 1990s and included a significant liberalization of the rules for technology and transfer, export and import, and financial transactions. As far back as in 1976, the Argentinian FDI-legislation was fundamentally changed to guarantee foreign firms essentially the same rights and obligations as national firms.⁶¹ This shows that Argentina has had similar laws, but since the crisis some parts of the framework have been reversed.⁶² The institutional situation might worsen as Argentina is trying to introduce a safeguard mechanism to be able to protect some parts of its industry. This implies that it has the possibility of withdrawing from an agreement if it falls into a recession.⁶³ This policy lowers the degree of liberalization in Argentina and the liberalization is at the moment lower in Argentina than in Brazil.

When considering the trade policy to the outside world, Brazil and Argentina have a common external tariff on both auto parts and cars, but not on buses and trucks. This means that the degree of liberalization is relatively low in both countries as they are still protected with high tariffs.

The main principles of MERCOSUL included a will to improve its institutional situation. In the auto sector, this has had little success. An accordance of free trade has still not been reached and from the interviews we realized that it will not happen in 2006 as planned. Instead, the trade-balance system is set to continue. Even if the tariff barriers are eliminated there are still NTBs, in the form of quotas, rules of origin and drawbacks

⁶¹ Blomström & Kokko, 1997; 32

⁶² de Paola, 2004

⁶³ de Paola, 2004

hindering free trade. The degree of liberalization of MERCOSUL is therefore low. Furthermore, a requirement like the safety-guard mechanism does not go hand in hand with a credible and stable RIA. We believe that it is the macroeconomic situation that is creating problems, and thus affecting the institutional environment. In order to attract investors by high liberalization, there must be a belief in a sustainable common market and lowering of both non-tariff and tariff barriers.

To be able to attract investors to the regional market, the harmonization of institutions and legal framework is imperative. Despite this, one has to keep in mind that MERCOSUL has only existed for a little more than 10 years. If you look at the EU, it took 40 years to reach the goal of a common market and an economic union.

4.2 Motives for investments in MERCOSUL

4.2.1 Tariff-jumping?

During the first and the second investment waves, the main motive for the companies to invest was tariff-jumping. The import-substitution strategy protected the industry by high tariffs which forced companies to locate in the region. Despite both Argentina and Brazil changing the policy towards an export-oriented strategy and starting the agreement with MERCOSUL, the trade barriers remained high in the automotive sector in the 90s. During the automotive regime, the tariff was up to 70% and in the interviews, both Bentancourt from GM and Tissier from Renault claimed; you had to locate to be able to compete. This shows that investment policies can have effects on FDI-flows. It is said that since the Automotive Regime came into force, 16 auto producers have taken advantage of the conditions provided by the regime.⁶⁴

The fact that many companies made investments both in Argentina and in Brazil shows that the tariff-jumping argument was valid even within the region. If the trade barriers were completely eliminated, it would be hard to explain how it makes economic sense to

⁶⁴ Arbix, 2001:134

locate both in Argentina and Brazil. According to Ogliari from Volvo, it is impossible to reap economies of scale with production in both countries and there must have been tariff-jumping reasons for investing.⁶⁵

Today, the tariff to the outside world remains high and will remain at this level even after the agreement between Argentina and Brazil is complete. This could keep investors in the region. However, as Pereira said, in the next 10 to 20 years, the tariffs will have to decrease, due to pressure from the WTO. In addition, to stay competitive in a world with increasing bilateral and regional free-trade agreements, a country or region cannot afford to protect the industry with high tariffs.⁶⁶ Therefore, we should expect that the tariff-jumping argument will be of less importance in the future and the MERCOSUL-region has to focus on its competitiveness to maintain its automotive industry.

4.2.2 Vertical investments?

Even though tariff-jumping seems to have been the main motive for the investments in the auto sector in MERCOSUL, the vertical investments are becoming more and more essential. The main cause for this can be attributed to the exchange rate. When the investments were made in the 90s, both the Peso and the Real were pegged to the dollar and appeared to be highly overvalued. Therefore, the MNCs did not have a possibility of using the MERCOSUL production as an export-base and were not able to compete. However, since the devaluation of the Real, and the later devaluation of the Peso, the lower exchange rate has created a comparative advantage for the two countries. This has made the MNCs rethink their strategies and recent investments in MERCOSUL have more of a vertical motive. Scania, for example, are increasing exports from the region. Other developing markets, such as Asia and Africa, are becoming export targets for the companies. This shift in motive should be preferred by Argentina and Brazil as new investments become more sustainable. They are based on the competitiveness of the region rather than as a way to get around high trade barriers. In a volatile market like South America, increased exports can also become a way to avoid these fluctuations.

⁶⁵ Ogliari, 2004

⁶⁶ Pereira, 2004

When the domestic market encounters a fall in demand, the companies can focus on exports and in this way maintain the same pace in production.

Vertically motivated FDI is also getting more prominent because all companies have global supplying systems. This means that they try to optimize the production chain by vertical specialization, depending on initial resources. Argentina and Brazil are producing where they have a comparative advantage and import the parts that are cheaper to produce somewhere else. However, the governments seem to be afraid of the development of fragmented markets like these as it could imply a loss of investments. To protect the domestic industry, both Argentina and Brazil have rules of origin that require 60% regional content. In Brazil this is stimulated by the FINAME. In Argentina, this has become an important issue since the crisis, as many MNCs closed down production. After pressure from local suppliers, president Kirschner has promised to strengthen the control of the local content requirement.⁶⁷

4.3 Changes in production strategies

Since the creation of MERCOSUL, there have been a number of changes in the production strategies of the auto firms. What is more uncertain is whether these changes are responses to the creation of MERCOSUL or a consequence of other changes in the global economic environment.

4.3.1 New plants and increased production

Since the second investment wave in the middle of the 90s, car firms have invested in several new plants in MERCOSUL. One of the reasons for this can be the creation of MERCOSUL. Both Tissier from Renault and Nielsen from Scania said that when MERCOSUL was launched, it created something of an investment euphoria. Many compared it to the EU and therefore saw an optimistic future in the region. However, the current under-capacity and the expectation of a more stable economic environment, with its increased purchasing power, might have been more important factors than

⁶⁷ Diaz-Oldenburg, 2004

MERCOSUL. These expectations made the industry invest, to be able to increase production. In Brazil there were speculations of a three million market in the end of the 90s, which spurred investments. However, the expectations were never met and today the plants are producing with a high share of unused capacity. In Argentina, the crisis had negative effects and some auto firms even ceased production in some of the plants.

4.3.2 New models

For the car industry to be more competitive, car companies have modernized their plants and invested in production of new models, aiming at both the domestic and international market. Scania produces the same truck in MERCOSUL as in Europe except for the most exclusive models which are not demanded. This shows that they are using the Brazilian production plant to supply the whole world instead of only the region, as was the case under ISS. Another reason for modernizing was the change in demand. The improved macro economic situation improved the purchasing power of the consumers. Furthermore, the opening up of the market made it possible for new competitors to enter and the competition increased. In order to keep up with the augmenting competition the companies started upgrading their models to maintain their market shares. Volkswagen changed their production line from really old models to, for instance, a cheap version of the VW Golf which is named Gol in South America.

4.3.3 Specialization

Since the creation of MERCOSUL, there have been some clear changes in production strategies, with increased specialization. Both GM and Renault are producing different models in the plants, and are exchanging between the countries. Ford is doing the same by producing the Ford Fiesta in Brazil and the Ford Escort in Argentina.⁶⁸

Table 4.1 shows that car manufacturing is the main type of production in both countries. However, the share of cars in Brazil is almost 20 percent units higher. The opposite is

⁶⁸ MBI, 1998:88

seen in the production of Light Commercial Vehicles (LCV) as it accounts for 30% of Argentina's production.

Table 4.1: Production in Argentina and Brazil 2003

Vehicle	Brazil		Argentina	
Cars	1504998	83%	109784	65%
Trucks	78938	4%	8936	5%
Buses	26990	1%	103	0%
LCV	216112	12%	50799	30%

Source: www.oica.net

This shows a tendency towards specialization in each country. Brazil is producing small and compact cars to serve the demand of the low income consumer and as a consequence of the tax benefits on small new cars. In Brazil people cannot afford big, luxurious cars, and therefore the industry has specialized in small ones with small engines. Argentina, on the other hand, seems to be focusing on bigger models such as vans and pick-ups. The reasons why the companies have chosen this production strategy is not entirely clear but one reason could be geography. Buenos Aires is the only big city while the rest of the population is scattered. This can create a need for more durable vehicles. This specialization could be the only way for both countries to maintain the investments.

4.3.4 Rationalization

If there were no trade barriers, it would be easier to optimize the production system and avoid unnecessary costs.⁶⁹ The companies would be able to use their comparative advantages internally.⁷⁰ One example is Volkswagen. They are already producing big,

⁶⁹ Nielsen, 2004

⁷⁰ Ogliari, 2004

expensive cars in Europe, small cars in Brazil and middle sized cars in Mexico.⁷¹ Scania might do something similar when free trade is reached with Mexico concerning trucks and buses. This implies that for these changes to occur, it is not sufficient with free trade within MERCOSUL, but with the rest of the world.

The size of the company and the type of models produced seem to affect production strategies. Volvo and Scania, which are not present in car and LCV production, have only one plant in Brazil for assembling vehicles. The Scania plant in Argentina only produces certain parts. Scania states that it is impossible to reach economies of scale with two plants in the region. GM and Renault on the other hand, are only producing smaller models, and they claim that they can gain scale with production in both countries. For GM it is understandable as they are the biggest vendor in both Argentina and Brazil.

4.3.5 Export-orientation

As mentioned earlier, the depreciations of the currencies have changed the production strategies towards a more export-based production. To illustrate this, in 1995 Brazil exported 263,000 units compared to 2004 with 600,000 units.⁷² The MERCOSUL-plants are producing the type of models that are demanded in other developing countries like Mexico and South Africa. As Brazil is focusing on cheap, small cars, they have a comparative advantage in those models, which gives an opportunity to export. If exports are increased, opportunities for the MNCs to use more of the unused capacity would improve and the companies would become less dependent on the development of the internal market. This export-orientation could be a way to maintain production in both Argentina and Brazil, as economies of scale could be reaped.

4.3.6 The MERCOSUL-effect on production

The changes in production strategies are in some senses effects of MERCOSUL. A higher degree of specialization can be attributed to the elimination of tariff-barriers between Argentina and Brazil. None of the companies are overstepping the quotas and

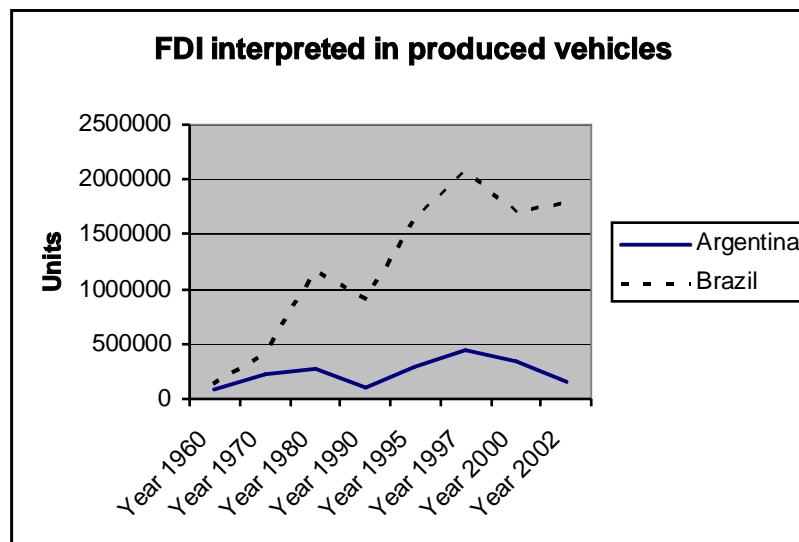
⁷¹ Bentancourt, 2004

⁷² Autodata, 2004: 50

therefore see trade as free. Volvo and Scania are not affected so much by MERCOSUL as all the big investments were made before the creation and they are only assembling the vehicles in Brazil.

The bigger market that came with MERCOSUL can have been an important factor for the investment euphoria, but the expectations of the internal markets seems to have played a bigger part. Therefore, we can conclude that the opening up of the markets in the beginning of the 90s was the major cause for changing production strategies and new investment - not the creation of MERCOSUL. However, MERCOSUL, together with depreciation of the currencies, can have attributed to the export-orientation. With MERCOSUL, it has been more important to create agreements with other trading blocs and in that way expand exports. Hence, the MERCOSUL-effect is a matter of speculation.⁷³

Figure 4.2: FDI in produced vehicles



Source: ANFAVEA, Adefa Year Report 2003

Figure 4.2 shows FDI-flows interpreted in terms of produced vehicles over the years. As can be seen clearly, the development of the sector has been different in Argentina and

⁷³ UNCTAD 2, 2000:115

Brazil. Brazil has experienced a steady climb in production, except the downturn in 1997, until today. Argentina also developed well until the peak in 1997, but with the crisis the market plummeted.

5. CASE STUDIES

In Argentina, the automotive industry is concentrated to Buenos Aires, Santa Fe and Córdoba where most of the car companies have placed their investments. Ford, DaimlerChrysler and Fiat have been in Argentina since the 60s. In the 70s, Renault and Scania started production in the country. During the 90s, new investments were made and new MNCs entered the market. Volkswagen, GM and Toyota, who were already located in Brazil, decided to increase their investments by building plants in Argentina. Moreover, PSA Peugeot Citroën invested in the South American market for the first time.⁷⁴ However, since the crisis Fiat has temporarily ceased all investments in terms of production.

At present, Brazil has 25 vehicle manufacturers and the automotive industry is the tenth largest in the world, and contributes about 10.4% of industrial GDP. This has been steady since the beginning of the 90s.⁷⁵ The installed capacity is 3.2 million vehicles per year⁷⁶, but in 2002 the production was only 1.81 million, which gives an unused capacity of 43%.⁷⁷ The first wave of investments took place between 1956 and 1970 when GM, Ford, Mercedes, Toyota, Volkswagen, Fiat and Scania established themselves in the region. The first expansion was concentrated to the Sao Paulo region.⁷⁸ However, Volvo started production of trucks and buses in Paraná and Fiat invested in Minas Gerais.⁷⁹ During the second investment wave in the 90s, almost all the main car manufacturers announced new investments in terms of building new plants or restructuring of existing plants in Brazil.

⁷⁴ Company web sites

⁷⁵ ANFAVEA, 2003:36-37

⁷⁶ Ogliari, 2004

⁷⁷ ANFAVEA, 2004

⁷⁸ Arbix, 2001:139-40

⁷⁹ Maceanu, 8-9

Renault, PSA Peugeot Citroën entered the market. Volkswagen, DaimlerChrysler and Toyota also invested huge sums in building new plants.⁸⁰

Almost all MNCs producing vehicles are present in Brazil and Argentina. As can be seen in table 5.1, there are four leading companies when it comes to units produced: General Motors, Volkswagen, Fiat and Ford. The diagram also shows the big difference in production size between the two countries. In 2002, the total production in Argentina amounted to 159,000 units, whereas in Brazil the production reached 1.792 million. It should be mentioned that both countries have a higher installed capacity.

Table 5.1: Total production 2003

Brand	Brazil	Argentina
GeneralMotors	511517	45166
Volkswagen	470142	21220
Fiat	35826	
Ford	218234	40011
Renault	59269	14985
Toyota	44580	17345
DaimlerCrysler	44568	7543
Peugeot	28156	23397
Citroën	18529	1204
Scania	9182	
Volvo	6162	
Iveco	2593	1501

Source: ANFAVEA & Adefa 2003

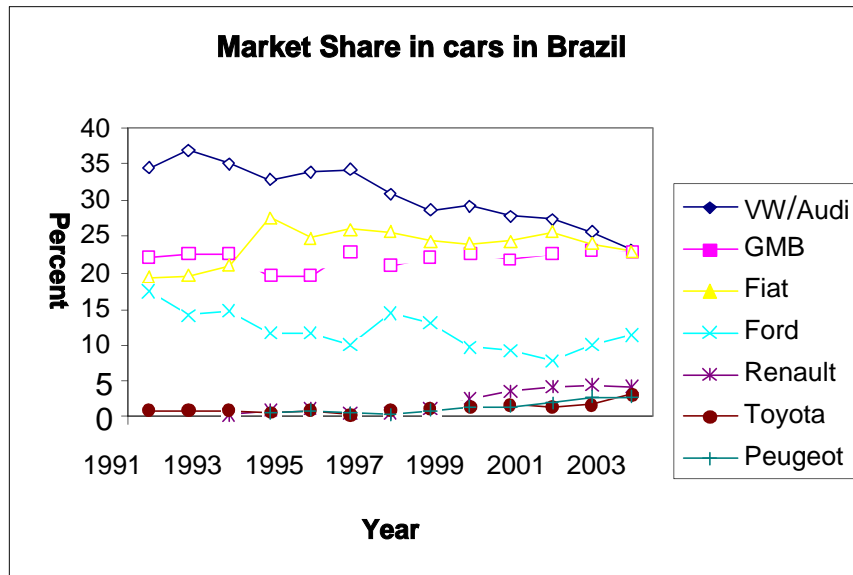
5.1 Car and LCV assemblers

As figure 5.2 shows, the biggest investors on the Brazilian market are GM, Ford, Volkswagen/Audi and Fiat. A common factor for these four car companies is that they have been investing in the country since the first investment wave and one explanation

⁸⁰ Companies' web sites.

for being the biggest actors on the market. The other companies localized in Brazil during the second investment wave in the 90s, but are slowly increasing their market shares.

Figure 5.2: Market share in cars in Brazil



Source: GM Statistics

5.1.1 Renault

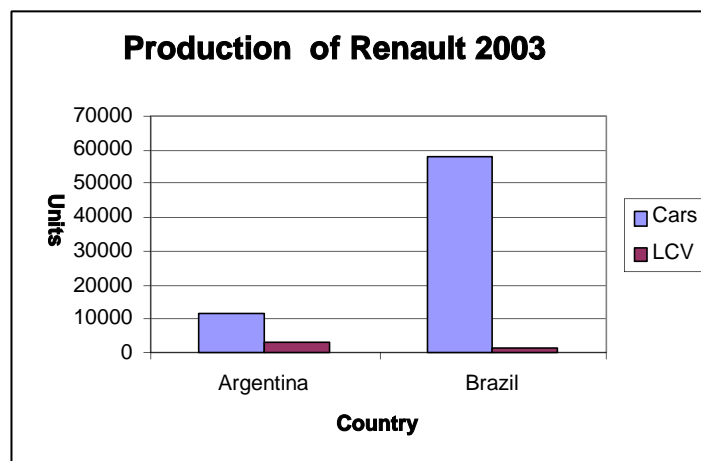
Renault has invested in two plants in the MERCOSUL region. The Brazilian investment has a capacity of 200,000 units a year. In co-operation with Nissan they also produce the Nissan pick-up. In their plant in Argentina they have a capacity of 110,000 units and in the beginning of the 90s Renault was the number one vendor in Argentina.

Renault came to Brazil in the 70s, not as a manufacturer but as a Ford subsidiary. As the ISS was still in place, the motive for locating to Brazil was to avoid the high tariff barriers. Brazil also had a locational advantage; the great expectations of the Brazilian market. However, as the Argentinean market grew fast, Renault changed their production strategy by ceasing their investments in Brazil. The company chose to invest in a new plant in Argentina.

Between 1993 and 1996 Renault had a dealer in Brazil that imported from Argentina. When Brazil introduced their auto regime, the import tax was altered to 70%, which

changed Renault's production strategy. Once again the tariff-jumping argument became apparent; if you were to be competitive in Brazil you had to have a plant there. Therefore, in 1999, Renault started to produce in their new plant in Curitiba, Brazil. However, an equally important argument for investing in Brazil was the expected growth of the market size, with the prediction of a three million market. This proves that the main reason for the increased investments in the auto sector during the 90s was not MERCOSUL itself, but the under-supplied market and the potential locational advantage such as access to cheap inputs.⁸¹

Figure 5.3: Production of Renault 2003



Source: ANFAVEA & Adefa

Renault's current production strategy is to have one specific model in each plant; complementary markets. This implies a specialization in order to become more efficient and to increase the locational advantage of the region. However, with the Argentinian crisis the market went back to the same levels as in the 60s. The crisis decreased the purchasing power of the consumers, and thus diminished the market, which had negative effects on the locational advantage. As seen in figure 5.3, this has had negative effects on the investments made, especially in Argentina, where the production in 2003 was slightly over 10,000 units. The recession in Argentina also affected its investments in Brazil as its production strategy was complementary markets with intra-trade. As a consequence, the

⁸¹ Tissier, 2004

plant in Brazil has an unused capacity of 32%. As seen in the figure, Renault's investments in Brazil have not been as negatively affected as Argentina. Due to the high unused capacity, Renault's future investments do not consist of building new plants, but instead production of new models.⁸² For instance, Renault will start to upgrade some models like the Mégane Sedan in 2005.⁸³

27% of Renault's production goes abroad, which is a sign that Brazil is being competitive enough to become an export-based market. This gives an indication that the exchange rate is favourable and creates comparative advantages such as cheap inputs like steel and labour.

Renault has no problem meeting the rules of origin criteria and this makes it qualified for the FINAME. The local content varies between 73 and 80 % and 60% of the parts come from within the state of Paraná where the Brazilian plant is located. Some parts need to be imported as they cannot reap economies of scale if produced in MERCOSUL. Moreover, Tissier claims that it is optimal to invest in heavy, big and fragile parts that are locally produced. These would not be economical to import when comparing the big size to the value. If the tariffs on auto parts were to be eliminated they would still have a high regional content as the distance is a barrier in itself. Tissier also mentioned that the infrastructure in Brazil is not well developed, which creates another barrier for trade. One plant supplying both Argentina and Brazil would be far too expensive because of the high transportation costs. Due to these factors Renault has decided to invest in each country. With two plants, Tissier claims that they still can take advantage of economies of scale.

Today the company has no problem trading within the quotas of the Sectorial Balance, which practically gives them free trade.⁸⁴ In the future, with the potential situation with no trade barriers, Tissier believes that cars would still be produced in South America since distance is a barrier in itself; cheap labour is not a crucial factor when determining

⁸² Tissier, 2004

⁸³ Autodata, 2004:130

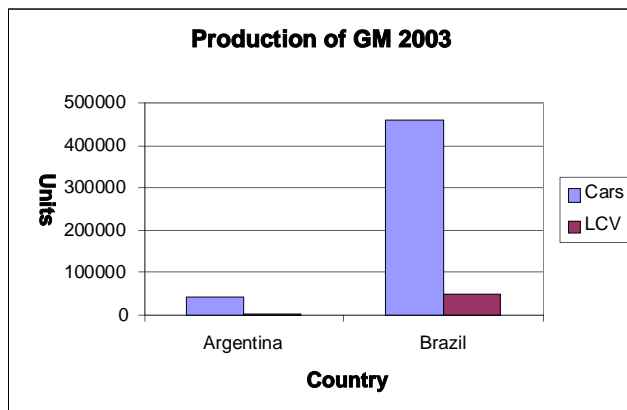
⁸⁴ Tissier, 2004.

the location. Furthermore, the main interest for Renault affiliates in South America will still be to supply the South American market and export to other developing regions like Asia and Africa - not Europe.⁸⁵

5.1.2 General Motors

General Motors produces Opel and Chevrolet in South America and only assembles cars and LCVs. As seen in figure 5.4, GM is concentrating the major part of its investments to Brazil where it is the biggest assembler. This can be explained by the large market size and the long presence in the country. The Argentinean crisis has certainly had effects on the investments in both countries, especially in Argentina. However, GM recently started a second shift in the Argentinean production, which is a sign of recovery.

Figure 5.4: Production of GM 2003



Source: ANFAVEA & Adefa

GM was first established in the MERCOSUL-region in 1912 in Uruguay. In the middle of the 20s they had CKD-complexes in Brazil and Argentina. In the end of the 50s GM started to manufacture pick-ups in Brazil. At that point in time they had no advanced technological equipment, so the rules of origin implied that 90% of the weight had to be nationally produced. This, together with high tariff barriers, was governmental strategy to

⁸⁵ Tissier, 2004

attract horizontal FDI to the country. GM maintained the market in Uruguay until the end of the 80s, but then ceased all of their investments because of the small market size.

In 1997 GM started to produce in their Argentinian plant in Rosario. Once again, the motive for making the investments was tariff-jumping. Argentina had started governmental policies to attract investment by increasing the tariff to the outside world and offering certain tax benefits. Governmental policies, together with the great expectations of the South American market, were according to Bentancourt the motives for the investments in the 90s. This shows that MERCOSUL was not the decisive factor. Currently, with high protection of the world's automotive industry, it makes economic sense for GM to make a lot of investments in terms of plants. It is more profitable than paying high tariffs for exports.

The automotive industry is not very flexible when it comes to investments. Production strategies cannot be changed in the short term; it takes planning at least three years ahead. Even if free trade is reached, companies and countries will want to protect the already made investments, because they involve a lot of money.⁸⁶ Therefore theories on what triggers investments are not very realistic as companies are tied to their investment decisions.

As GM already is present in almost every country, the company does not fear free trade in the global community. However, it would probably decrease its investments in some countries as specialization and vertically motivated FDI increase. In South America it would continue to use the same production strategy.

Pedro Bentancourt at GM claims that the MERCOSUL market has a locational advantage when it comes to input costs. Therefore it does not need to protect the market. Brazil has a good access to inputs with low production costs. However, due to high taxes the price of the given good is elevated. The high taxes, together with the underdeveloped

⁸⁶ Bentancourt, 2004

infrastructure and rigid labour laws, diminish the locational advantage of Brazil. Without taxes, not even China could produce at such a low cost as MERCOSUL according to Bentancourt.

Today GM exports large quantities to China, South Africa and India. In 2005 GM-Brazil projects that their exportation will amount to 190,000 units which is almost a third of the total production.⁸⁷ This shows that the Brazilian manufacturing is becoming more competitive and thus can reap the advantages of export-promotion policies.

GM has a regional content of more than 60%, and in some models up to 90%. If the scale permits, the company tries to invest in production of parts in the region. As it is the biggest assembler, GM can have a higher degree of scale in production of parts, hence a lower share of imports. This high degree of regional content lowers the production prices, as tax on imported parts is avoided. Thus GM can be more cost-efficient than smaller assemblers that are dependent on imports.

5.2 Truck and bus assemblers

The main competitors in the truck and bus market, without dividing into sub segments, are Volvo, Scania, Volkswagen, Mercedes-Benz and Ford. All companies except Volvo have investments in both Argentina and Brazil, but as the volumes in Argentina are much lower, we will focus on Brazil. As seen in figure 5.5, Volkswagen and Mercedes are the dominating companies in the market. Scania and Volvo are more focused on the heavy class where they have market shares of 23% and 19%.⁸⁸

⁸⁷ Autodata, 2004

⁸⁸ Report, 2004:8

Figure 5.5: Market share in Brazil



Source: ANFAVEA

5.2.1 Scania

Scania came to Brazil in 1957 and to Argentina in 1975. In Sao Bernardo do Campo, Brazil, Scania produces 70 trucks per day and the total amount produced per year is around 9000 vehicles. In Sao Bernardo do Campo they make cabins, engines, axels, and chassis. The Scania plant in Argentina is only used for making components such as axels and gear boxes which are shipped to Brazil. For Scania it is not cost-efficient to have investments in both countries.

The purpose of investing in Brazil was the locational advantage in terms of the large market, which today is Scania's biggest. South America is a small market but Brazil alone is big. The motive for making horizontal investments in Argentina was to avoid trade barriers and thus access the internal market. If you wanted to reach the internal market you had to start production there. Bidding took place where those who were prepared to invest the most got the quotas.⁸⁹ Currently, investing in Argentina is not part of their production strategy because the Brazilian plant has enough capacity to supply

⁸⁹ Nielsen, 2004.

South Africa, Asia and South America. Another reason for only locating in Brazil is to avoid currency fluctuations within MERCOSUL, which lowers the risks for investments.

With the devaluation of the Real, the weak exchange rate became favorable for exports. This changed Scania's production strategy towards a focus on exportation. The Brazilian inputs became much cheaper, which in turn strengthened the locational advantage of the country. Today, Scania exports 50% of its total production and its main markets are Africa and Asia. The high share of export is also a way to protect the company against the volatile market in South America. The company can maintain a stable investment and use the production apparatus to its maximum capacity.

The protectionist policy of FINAME might be more important for the government when it comes to trucks and bus companies. The truck companies produce such low volumes compared to the car assembles, that without FINAME it might be more cost-efficient for them to import parts. Scania has around 65% regional content which also makes it qualified for FINAME. However, as it has a global supplying system some parts will continue to be imported. For example, electronic parts are hard to access in South America, whereas Brazil has a locational advantage in cheap inputs such as raw material, steel, rubber.

According to Nielsen, the deeper integration of the automotive sector in MERCOSUL has a long way to go. The evolvement depends much on the macro economical development in the countries. As history has proven, the progress of the agreement has come to a stand-still whenever the countries have gone through a recession. To deepen the integration process, the first step is, according to Nielsen, a long and stable growth. With economic development countries open up to exports and this is the key to sustained growth. The export-oriented strategy has been used by Chile, which is now the most stable country in South America.⁹⁰ Free trade within MERCOSUL is important but Nielsen claims that trade agreements with NAFTA and EU should not be forgotten.

⁹⁰ Nielsen, 2004

5.2.2 Volvo

The Volvo business in Brazil started in 1934 through a sales subsidiary. Volvo do Brazil was established in 1979 and produces trucks and buses. The Curitiba plant is Volvo's third cabin plant and second engine plant world-wide. The plant has around 1600 employees and produces around 6000 vehicles per year.⁹¹ Volvo has increased its investments in Curitiba, from 23 trucks per day to 32. It still has capacity to operate a second shift.⁹² Before the crisis, Argentina was the biggest export market for Volvo do Brasil. Today, Chile is the main target.

Volvo invested in Brazil because the country had a locational advantage in terms of market size and access to the most developed suppliers in South America.⁹³ Volvo is the only company with investments solely in Brazil. It believes strongly in the continuing liberalization of MERCOSUL and therefore has and will continue to invest in Brazil. From the very beginning of MERCOSUL it saw a future in a free trade area of the four countries.⁹⁴ Volvo decided to put all the production in one place to get synergy effects. In that way it can control the whole logistic flow. Marquesini claims that it is better from a production point of view. From Brazil Volvo can export to Argentina where it has an office and a spare parts distribution centre. The only difference compared to other companies, is that the vehicles solely come from Brazil. This shows that Volvo's production strategy is to rationalize the production where the locational advantage is most favourable. Another example of its restructuring of production is the recent merger with Renault. Volvo had only invested in heavy duty trucks but wanted to invest in the medium heavy duty truck market. It had two options: bring the FL model from Belgium, or to build a medium truck. Renault had a medium truck that was not produced in Brazil so the companies decided to merge. The Renault medium truck is used as a basis but with a Volvo brand. This was the most cost efficient alternative for Volvo as it would be very

⁹¹ Report, 2004:1-2

⁹² Marquesini, 2004.

⁹³ Ogliari, 2004

⁹⁴ Ogliari, 2004

expensive to develop a new product. The truck has been in production since September 2003.

Volvo has a regional content high enough to qualify for FINAME. To avoid exchange rate fluctuations, import taxes and freights, Volvo always tries to increase the local content. Although this is the goal for Volvo, it is not always possible since it has to follow the Global Supplying System. In addition, the size of the South American market is not sufficient for Volvo to reap economies of scale. Certain parts that are made exclusively for Volvo have to be imported. All the main competitors: Scania, Mercedes and Volkswagen, have a higher regional content than Volvo, which makes them less exposed to exchange rate fluctuations.⁹⁵

Volvo do Brasil is looking to export to other markets. At the moment it is increasing its CKD-exports to Iran and other countries in the Middle East. China is also a market the company is seeking to explore as it is more profitable to export some models from Brazil. This is because of the access to cheap inputs such as raw materials and labour that create a favourable locational advantage. Today it exports around 15% of the CBU-trucks and the entire CKD-production.⁹⁶ However, all the big markets are still protected by high tariff barriers which make it less appealing for companies to export to these blocks. For example, EU has a tariff for heavy trucks of 23% and Mexico 53%. Volvo is exporting cabins from Brazil and they are being sold to Europe. The engine plant exports blocs to Sweden but also engines to other plants. However, compared to Scania its export sector is not as well-developed and therefore it cannot take advantage of the drawback system. With the system of paying at the time of entrance, Volvo do Brasil has not been able to utilize around 30% of the drawback because there has been uncertainty about which parts are intended for exports.⁹⁷

⁹⁵ Report, 2004:5

⁹⁶ Marquesini, 2004

⁹⁷ Report, 2004: 4

Overall, Ogliari at Volvo believes that the development of the regional integration is dependent on the macroeconomic situation in the countries involved. Progress of the negotiations of MERCOSUL is most likely to occur when both countries have an economic growth and upturn. At the moment Brazil is trying to help Argentina in its financial recovery by compromising and giving Argentina incentives to niche their production in the automotive industry. This would create a win- win solution for both countries. In the future, Ogliari predicts that rules of origin will play a key role in protecting the MERCOSUL market, seeing as the tariffs will have to be eliminated due to the WTO and the increased competition.⁹⁸

⁹⁸ Ogliari, 2004

5.3 Summary

The motives behind the investments made by the MNCs in the beginning of the 90s were mainly tariff-jumping and the expectations on the internal market. The tariffs still play a part when the auto companies plan their investment strategies seeing as tariff barriers still exist in some areas . However with the sectorial balance in place, the companies are to some extent able to reallocate their production to areas where the locational advantages are more favourable. More companies are using Brazil as an export base in order to reach a bigger market. With the favourable exchange rate and the access to cheap labour the MNCs are able to compete on the market. This shows that companies are rationalizing their production to where the locational advantage is most favourable. Furthermore, this indicates that the motives for investing in the region are shifting away from the tariff-jumping motive and efficiency seeking investments are becoming more apparent. Many of the MNCs believe that MERCOSUL will play a big part in the future, but due to Argentina's struggling economy it will take a longer time for the integration process to reach its goal.

6. CONCLUSIONS

To show the effects the RIA have had on the auto industry, we have incorporated the aspects into the matrix and here comes a summary of our findings. According to Blomström & Kokko, the creation of the RIA should affect FDI-flows in a positive direction. The locational advantage should improve as the macro economic climate becomes more stable, the market-size will increase and it will give the firms greater access to inputs. The RIA should also work as a mechanism to liberalize trade and investment policies. The conclusion we have drawn from our study is that these mechanisms have not yet had these positive impacts in the auto industry in order to attract FDI.

The macro economic environment has not become more stable, in fact almost the opposite has occurred with the Argentinian crisis. Currently Brazil and Argentina are in different economical stages, making it difficult for the governments to deepen the integration process. The instability of the macro economic environment also had effects on other areas such as the institutional situation and comparative advantage in inputs. Therefore, they have a long way to go until they can be attractive as an economically stable RIA.

Even though MERCOSUL has expanded the internal market, the advantages are limited. The MERCOSUL market has become bigger but is still small compared to other important trading blocs. Argentina will benefit from the large size of the Brazilian market. However, Brazil will only gain from a larger market size if MERCOSUL signs agreements with other trading blocs and thus have a locational advantage in market size. Only then will the RIA be attractive for MNCs and make them change their investments and production strategies.

Concerning the locational advantage in access to inputs, Brazil is attractive because of the abundances of natural resources and cheap labour. The depreciations of the currencies

have greatly improved the locational advantage of MERCOSUL and it is the main reason for more export-oriented strategies undertaken by the MNCs. However, due to high taxes on labour, the price of labour is elevated. Today Asia and Eastern Europe are becoming serious threats as their locational advantages are improving steadily with the cheap inputs and their proximity to the bigger markets. To stay competitive, the region must rationalize the production through specialization, producing modern models and be more export-oriented. However, costs of inputs are not as important if there still exist tariff barriers which generally have a great influence on the decision whether to invest in the RIA or not.

Another obstacle for the RIA is the NTBs that still exist in the automotive sector. The degree of liberalization and integration in the sector has not proceeded according to the initial schedule. The institutional and macro economic changes made before the creation of MERCOSUL has been more important for FDI-flows. MERCOSUL can be seen more as a “by-product” of the opening up of Argentina and Brazil. The conception that the auto companies did not take MERCOSUL into account when planning investments is therefore important. The low level of liberalization is also apparent as the tariff-jumping argument is still valid for explaining investments. The reduction in tariffs has not been large enough to change the motive behind FDI. For MERCOSUL to stay competitive in the long run, we believe that they must lower tariffs and be a base for exports. The regional market is not large enough to survive without the opportunity to export. Therefore, we believe that the motive for investments will change from tariff-jumping to efficiency-seeking FDI such as access to inputs.

Initially, we had a perception that MERCOSUL had a key role in the investment boom in the 90s. This turned out to be a generalization. MERCOSUL has had a relatively small impact on investments. We believe however, that the great expectations of the market in the beginning of the 90s together with the internal changes in the countries, were the main motive for FDI. The regional integration has to eliminate many obstacles to become more liberalized and improve the locational advantage. Not until we can consider

MERCOSUL as being somewhere close to area 1 in the matrix can we really talk about MERCOSUL and its effects on the FDI-flows.

For MERCOSUL to become a successful RIA in the future and attractive for investors there are many areas that need to be improved. Both Argentina and Brazil need to be stable economically, the liberalization of trade has to improve- both intra-trade and with other trading partners. Only then can they reach a bigger market, increase exports and thus be more attractive for FDI. If the liberalization is improved, the increased competition will lead to more efficient producers and better locational advantage for the region. For the MNCs to maintain production in both countries, a specialization is required. Otherwise, we believe that Argentina would be the country to have the least to gain.

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