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Open Regionalism or Old-Fashioned Protectionism? A Look at the Performance of MERCOSUR's Auto Industry

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OPEN REGIONALISM OR OLD-FASHIONED PROTECTIONISM? A LOOK AT THE PERFORMANCE OF MERCOSUR'S AUTO INDUSTRY

STEPHEN P. SORENSEN*

| | | |
|------|--|-----|
| I. | INTRODUCTION | 372 |
| II. | MERCOSUR DEFINED..... | 374 |
| | A. <i>Background of MERCOSUR</i> | 374 |
| | B. <i>Structure of MERCOSUR</i> | 375 |
| | C. <i>The Common External Tariff</i> | 376 |
| | D. <i>Moving Beyond a Customs Union</i> | 377 |
| III. | MERCOSUR'S TRADE PERFORMANCE | 377 |
| IV. | CALCULATING COMPARATIVE ADVANTAGE | 378 |
| | A. <i>Net Export Ratio</i> | 380 |
| | B. <i>Export-Based Revealed Comparative Advantage Analysis</i> | 381 |
| V. | EMPIRICAL RESULTS FOR MERCOSUR'S AUTOMOTIVE INDUSTRY | 382 |
| | A. <i>MERCOSUR's Trade in Passenger Vehicles</i> | 383 |
| | B. <i>MERCOSUR's Trade in Automobile Parts and Accessories</i> | 386 |
| VI. | INTERPRETING MERCOSUR'S TRADE PERFORMANCE | 388 |
| | A. <i>Trade Barriers Facing Foreign Producers</i> | 388 |

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| | | |
|-------|--|-----|
| B. | <i>The Structure of MERCOSUR's Automotive Industry</i> | 391 |
| C. | <i>Economies of Scale and Productivity</i> | 393 |
| VII. | POLICY IMPLICATIONS | 395 |
| A. | <i>Did MERCOSUR Create Any Losers?</i> | 395 |
| B. | <i>The Persistence of Industrial Policy-Making in MERCOSUR's Auto Industry</i> | 398 |
| VIII. | CONCLUSION | 399 |
| IX. | APPENDIX | 400 |
| A. | <i>Tables</i> | 400 |
| B. | <i>Figures</i> | 410 |

I. INTRODUCTION

The issue of trade in South America was very much in the diplomatic forefront in 1997. The success of the Southern Common Market¹ (MERCOSUR) comprising Argentina, Brazil, Paraguay and Uruguay seemed to suggest the possibility that the region could become a relatively formidable trading bloc. In response to the promise of MERCOSUR, President Clinton pressed Congress for fast-track authority to enable him to negotiate free trade deals in South America with the goal of eventually creating a 34-member Free Trade Area of the Americas (FTAA). Visiting Brazil and Argentina in October 1997, President Clinton seemed to smooth the way for future free trade deals with MERCOSUR members. Such deals seemed vital to the United States because there was some fear that it might get shut out of its own backyard, as the rest of the industrialized world seemed to be securing trade agreements with MERCOSUR.² In the end, Congress denied President Clinton

1. Treaty Establishing a Common Market, Mar. 26, 1991, 30 I.L.M. at 1041 [hereinafter MERCOSUR]. Referred to in Spanish as Mercado Común del Sur.

2. See Stephen Guynn & Emeric Lepoutre, *Doing Business with Mercosur, South America's Common Market*, 217 N.Y. L.J. 1, 7 (1997) (describing visits by Chancellor Kohl and President Chirac to South America just prior to President Clinton).

fast track authority, dimming the prospect of an FTAA, at least in the short term.

Aside from its political dimension, a regional trading arrangement like MERCOSUR raises a number of economic concerns. For example, such arrangements often erect discriminatory trade barriers that may cause imports from member countries to supplant imports from more efficient non-member countries.³ This phenomenon—referred to as trade diversion—may tend to reduce social welfare due to higher prices and the inefficient allocation of resources. Despite these possible drawbacks, a customs union also has the potential to create trade in a number of ways. First, if a customs union results in overall reductions in tariff and non-tariff barriers, it will likely stimulate trade among members and non-members alike. Second, regional integration, economic liberalization and harmonization of macroeconomic policies could provide a more certain and stable economic system and thereby foster trade. Finally, in industries characterized by economies of scale, the creation of a customs union may allow producers in member countries to achieve efficient levels of production that were previously unattainable. Thus, any assessment of the social welfare effect of a customs union must balance these benefits of trade creation against the costs of trade diversion.

This article considers this cost-benefit analysis in the context of MERCOSUR's automotive industry. The automotive industry is especially informative for the following reasons: (1) it constitutes about one-third of all MERCOSUR exports; (2) its exports have grown the most rapidly under MERCOSUR; (3) both Brazil and Argentina consider the industry vital to their long-term economic interests; and (4) it has raised serious concerns among countries outside MERCOSUR. Part II first provides background material on MERCOSUR and a general overview of its structure. Part III considers MERCOSUR's

3. See ALEXANDER YEATS, THE WORLD BANK, POLICY RESEARCH WORKING PAPER NO. 1729, DOES MERCOSUR'S TRADE PERFORMANCE RAISE CONCERNS ABOUT THE EFFECTS OF REGIONAL TRADE AGREEMENTS? 1 (1997). A leaked copy of this study generated significant controversy which culminated in a request by the Brazilian government that the study not be published under the auspices of the World Bank. See Mary Anastasia O'Grady, *Brazil Wants a World Bank Critic of MERCOSUR Silenced*, WALL ST. J., Nov. 22, 1996, at A15. Although Brazil did not get its way, the study was published with the explicit caveat that the author was not certain whether trade policy had reduced social welfare. YEATS, *supra*, at Summary Findings.

overall trade performance. Part IV provides a theoretical framework for analyzing a customs union and measuring revealed comparative advantage, while Part V reports empirical results. Part VI interprets the empirical results in light of the structure of tariff and non-tariff barriers in MERCOSUR countries, as well as the structure of the automotive industry. Finally, the article concludes with a discussion of the policy implications and an assessment of the future of MERCOSUR in light of the region's political economy.

II. MERCOSUR DEFINED

A. *Background of MERCOSUR*

MERCOSUR was created by the Treaty of Asunción signed on March 26, 1991.⁴ The Treaty of Asunción was amended once in the Additional Protocol of the Treaty of Asunción, known as the Protocol of Ouro Preto, which was signed on December 17, 1994.⁵ The Protocol of Ouro Preto deals mostly with institutional issues and dispute settlement and gives MERCOSUR a "distinct international legal personality."⁶ More recently, Chile and Bolivia became associate members on October 1, 1996, and March 1, 1997, respectively.⁷

In establishing MERCOSUR, the members had a number of goals: the free movement of goods and services, capital and labor; elimination of customs tariffs and non-tariff barriers and the establishment of a common external tariff; the adoption of a common trade policy; and the coordination of macroeconomic policies.⁸

Initially, there was some skepticism about the feasibility of MERCOSUR because its parties had pursued regional

4. MERCOSUR, *supra* note 1, 30 I.L.M. 1041.

5. Additional Protocol to the Treaty of Asunción on the Institutional Structure of MERCOSUR, Dec. 17, 1994, 34 I.L.M. 1244 (1995) [hereinafter *Protocol of Ouro Preto*].

6. See SAM LAIRD, WORLD TRADE ORGANIZATION, STAFF WORKING PAPER TPRD-97-002, MERCOSUR: OBJECTIVES AND ACHIEVEMENTS 3 (1997).

7. Guynn & Lepoutre, *supra* note 2, at 1.

8. See Roberto Bouzas, *MERCOSUR y Liberalización Comercial Preferencial en América del Sur: Resultados, Temas y Proyecciones*, in *NAFTA Y MERCOSUR: UN DIÁLOGO CANADIENSE-LATINOAMERICANO* (Richard G. Lipsey & Patricio Meller eds., 1996).

integration unsuccessfully in the past.⁹ Countries pursuing regional integration in the past, most notably Brazil, took the view that protecting infant industries from competition was necessary to achieve economies of scale and efficiency. Thus, there is some concern that MERCOSUR is simply import substitution policy all over again, only on a larger scale.¹⁰ On the other hand, many argue that comparisons to prior import substitution policies are not appropriate because MERCOSUR was created as part of a significant economic liberalization program.¹¹ Whether economic liberalization would have been possible without a customs union, i.e., could the MERCOSUR countries have simply opened their markets without giving each other preferential access?, will be discussed in Part VII *infra*.

B. Structure of MERCOSUR

MERCOSUR is an international treaty that establishes intergovernmental bodies. The Protocol of Ouro Preto establishes the institutional structure of MERCOSUR in Chapter I as follows: (i) Council of the Common Market (which consists of Ministers of Foreign Affairs and Ministers of Economy); (ii) Common Market Group (which consists of four representatives from each country and must include representatives of the Ministries of Foreign Affairs, the Ministries of Economy and the Central Bank); (iii) MERCOSUR Trade Commission; (iv) Joint Parliamentary Commission; (v) Economic-Social Consultative Forum; and (vi) MERCOSUR Administrative Secretariat.¹²

The Council of the Common Market is the only body with the legal authority to negotiate and sign agreements on behalf of MERCOSUR.¹³ The Common Market Group provides oversight of the management of MERCOSUR through trimestrial meetings.¹⁴ The Trade Commission coordinates trade policy and

9. See Joseph Grunwald, *The Rocky Road Toward Hemispheric Economic Integration: A Regional Background with Attention to the Future in THE ENTERPRISE FOR THE AMERICAS INITIATIVE: ISSUES AND PROSPECTS FOR A FREE TRADE AGREEMENT IN THE WESTERN HEMISPHERE* 123 (Roy E. Green ed., 1992).

10. See YEATS, *supra* note 3, at 28.

11. See, e.g., LAIRD, *supra* note 6, at 2; see also Miguel Rodriguez Mendoza, *Which Mercosur?*, *LATINFIN*, Jan.-Feb. 1997, at 70.

12. Protocol of Ouro Preto, *supra* note 5, 34 I.L.M. at 1244-55.

13. *Id.* art. 8, 34 I.L.M. at 1249.

14. *Id.* art. 14, 34 I.L.M. at 1250-51.

the implementation of the common external tariff.¹⁵ The other bodies are largely consultative.¹⁶

C. *The Common External Tariff*

Under Article 5 of MERCOSUR, tariffs were to be reduced in a progressive, linear and automatic manner and non-tariff barriers (NTBs) eliminated with the goal of zero tariffs and no NTBs by the end of 1994.¹⁷ Article 5 also called for the application of a common external tariff (CET) to encourage the foreign competitiveness of members.¹⁸ Table 1¹⁹ shows the current tariff structure and target CET for selected goods.

The effect of the CET has been somewhat limited because Argentina, Brazil, and Uruguay were each granted 300 exceptions to the CET while Paraguay was granted 399 exceptions.²⁰ The exceptions allow member countries to impose a tariff that is higher or lower than the CET for specific products over a limited period of time. Tariffs on these excepted goods must converge to the CET in a linear and automatic manner by January 2001 for Argentina and Brazil and by 2006 for Uruguay and Paraguay.²¹ Thus, as Table 1 shows, Brazil must lower its manufacturing tariff from 12.3% to 11.5% on average, while Paraguay will have to raise its tariff.

Another notable feature of the CET is that it escalates as goods move up the value chain. Average tariffs apply as follows: 6.3% for raw materials (1st stage of processing); 9.1% for semi-manufactured goods and goods used as inputs for other products; and 12.5% for fully processed goods. Among MERCOSUR countries, Brazil currently has the most pronounced escalation for processed goods.²²

15. *Id.* art. 19, 34 I.L.M. at 1252.

16. *See generally, id.* ch. I, 34 I.L.M. at 1244-55.

17. MERCOSUR, *supra* note 1, art. 5(a), 30 I.L.M. at 1045.

18. *Id.* art. 5(c), 30 I.L.M. at 1046.

19. *See* Table 1 *infra* Appendix Part A.

20. *See* WORLD TRADE ORGANIZATION, WT/COMTD/1/Add.4, SOUTHERN COMMON MARKET (MERCOSUR) AGREEMENT: QUESTIONS AND REPLIES, ADDENDUM 2 (1996).

21. LAIRD, *supra* note 6, at 7.

22. Brazil imposes an average tariff of nearly 15% on fully processed goods. *See* LAIRD, *supra* note 6, at 11.

D. Moving Beyond a Customs Union

Although MERCOSUR is currently a customs union, its members appear to have greater aspirations for cooperation and coordination. In particular, members have expressed a desire to move toward a common market that would allow for the free movement of labor and capital.²³ In addition, members have discussed the coordination of policy issues beyond the CET to address problem areas such as inflation, foreign investment and trade.²⁴

Moreover, MERCOSUR members believe the union provides political and security benefits and consider their cooperation a bulwark against political instability and any non-democratic impulses. The rationale is that by making the countries interdependent with respect to trade and macroeconomic policy-making, any non-democratic impulses will be kept in check. This democratic stabilization rationale seems legitimate in light of MERCOSUR's response to the political crisis in Paraguay in 1996 when, faced with the threat of a military takeover of Paraguay's government, the four MERCOSUR presidents met and approved the "democratic clause," establishing respect for democratic institutions as a required condition for membership in MERCOSUR.²⁵ However, despite the grandiose rhetoric of extensive cooperation, it would be premature to conclude that MERCOSUR will become more than a trade agreement.

III. MERCOSUR'S TRADE PERFORMANCE

As Table 2²⁶ shows, trade among MERCOSUR members and with non-members has grown tremendously over the last five years or so. Exports from MERCOSUR countries grew to \$70 billion in 1995—an increase of more than 50% from 1991 to 1995. In addition, the share of exports going to MERCOSUR members nearly doubled from 11% in 1991 to 20.5% in 1995. Moreover, imports grew at an even faster rate—about 135% over the 1991-

23. *Id.* at 24.

24. *See id.* at 23.

25. *See Paraguay: What a Choice*, THE ECONOMIST, Sept. 13-19, 1997, at 33-34; *see also Embassy of Uruguay, What we want to Know, Need to Ask and Should Learn About Mercosur* (visited Mar. 24, 1999) <<http://embassy.org/uruguay/econ/mercosur/merc-003.html>>.

26. *See* Table 2 *infra* Appendix Part A.

95 period—and surpassed exports for the first time in 1994. In total, MERCOSUR trade grew by almost 90% from 1991 to 1995.

It can also be inferred from Table 2 that MERCOSUR now has a trade deficit with the rest of the world. In 1991, it exported about \$12 billion more than it imported, while in 1995 it imported about \$1 billion more than it exported.

The remarkable extent to which MERCOSUR members have become more integrated with each other and the rest of the world is more readily apparent from the World Bank rate of integration indicator in Table 3²⁷. This indicator is calculated by taking the difference between the rate of growth of total trade and the rate of growth of gross domestic product (GDP). Growth in trade that exceeds growth in GDP suggests that a country or region is becoming more integrated. In the 1980s, growth in trade among MERCOSUR countries only marginally exceeded GDP growth (i.e., rate of integration of 2.4). However, in the 1991-95 period, MERCOSUR's rate of integration increased tenfold or 929% which reflects the substantial increase in overall trade among members. However, MERCOSUR's rate of integration with the rest of the world grew even faster in percentage terms (1122%). This reflects the great extent to which markets were closed to the rest of the world prior to 1991. These indicators confirm that MERCOSUR and the concomitant liberalization of trade in South America has created trade.

IV. CALCULATING COMPARATIVE ADVANTAGE

It is well established that economists have identified the potential for customs unions to divert trade from more efficient to less efficient producers.²⁸ In the case of MERCOSUR, there is some concern that discriminatory trade barriers deny consumers access to higher quality, lower cost goods.²⁹ Thus, consumers in a customs union may end up paying more for goods than they otherwise would under a free trade regime.

Aside from its potential effects on consumer welfare, this trade diversion may also encourage continued inefficiencies in production because inefficient member producers do not receive

27. See Table 3 *infra* Appendix Part A.

28. See generally JAMES E. MEADE, PROBLEMS OF ECONOMIC UNION (1953).

29. See YEATS, *supra* note 3, at 30.

the correct market signals. Rather than being forced to either become more efficient or shut down, these producers have the incentive only to keep their costs below non-member costs adjusted upward for tariff and non-tariff barriers. For example, all else equal, a 50% tariff will allow a local producer to be competitive with foreign producers as long as the local producer's marginal cost is no more than 50% higher than its foreign competitor's marginal cost. On the other hand, perhaps the creation of a substantial market for output has allowed automobile producers in Brazil and Argentina to finally achieve long-sought economies of scale and competitiveness. In short, the important question is whether the producers are competitive relative to the rest of the world's auto producers, i.e., do MERCOSUR's auto producers have a comparative advantage?

The law of comparative advantage is one of the most fundamental and widely accepted findings in the area of international trade economics.³⁰ Briefly, it stands for the proposition that countries should export those goods which they can most cheaply produce relative to other countries. As a corollary, countries should import those goods for which their relative costs are higher than the costs of their trading partners. However, testing these theoretical findings empirically is difficult because comparative advantage can almost never be measured directly.³¹ Nonetheless, economists have developed indirect methods of measuring revealed comparative advantage (RCA) using data on import and export flows.³²

This Article considers two trade-based measures of revealed comparative advantage: net export ratio and export-based revealed comparative advantage analysis.

30. See generally JAMES E. MEADE, *TRADE AND WELFARE: THE THEORY OF INTERNATIONAL ECONOMIC POLICY* (1955).

31. Testing the theory empirically would require an analysis of relative prices under autarky, which are not available for countries engaged in international trade. See DAVID GREENAWAY & CHRIS MILNER, *TRADE AND INDUSTRIAL POLICY IN DEVELOPING COUNTRIES: A MANUAL OF POLICY ANALYSIS* 181 (1993).

32. See generally UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION, *INTERNATIONAL COMPARATIVE ADVANTAGE IN MANUFACTURING: CHANGING PROFILES OF RESOURCES AND TRADE 4* (1986) [hereinafter UNIDO]. Other measures of revealed comparative advantage can be generated based on production and consumption statistics or prices adjusted for the level of domestic subsidies. For a discussion of the latter, see GREENAWAY & MILNER, *supra* note 31, at 188-93.

A. *Net Export Ratio*

Net Export Ratio (NER) looks at net exports as a proportion of total trade.³³ It can be calculated by dividing the difference between exports and imports of a product by the sum of the exports and imports of the product.³⁴

A few points about this ratio should be noted. First, arithmetic dictates that it vary from -1 to +1. Second, the closer the ratio is to 1, the more it reveals a comparative advantage. On the other hand, as the ratio gets closer to -1, a greater comparative disadvantage is revealed. Values for this ratio around zero are ambiguous.³⁵ Third, NER assumes that there are no tariff or non-tariff barriers distorting trade flows. For example, a country could achieve NER of 1 by simply banning imports. Of course, we could hardly conclude under these circumstances that a country had a comparative advantage. Finally, the NER in this paper will exclude intra-MERCOSUR exports and imports from its analysis because trade within MERCOSUR is, by definition, governed by preferential arrangements. Thus, if we want to measure revealed comparative advantage vis-à-vis other world producers, only those trade flows that do not reflect preferential arrangements should be included. For example, an export from Brazil to Argentina would not meet the test of the marketplace in the

33. See GREENAWAY & MILNER, *supra* note 31.

34. The formula is as follows:

$$NER = \frac{x_{ij} - m_{ij}}{x_{ij} + m_{ij}}$$

where x_{ij} = exports of good j by country or region i

m_{ij} = imports of good j by country or region i

Id.

35. It should be noted that this index is limited for goods in which there is little trade volume. In such cases, economists normalize for the relative importance of trade flows. See, e.g., Juergen B. Donges & James Riedel, *The Expansion of Manufactured Goods in Developing Countries: An Empirical Assessment of Supply and Demand Issues*, 113 WELTWIRTSCHAFTLICHES ARCHIV 58-87 (1977).

same way that an export to the United States would because of the lower tariffs facing Brazilian exporters to Argentina.³⁶

B. *Export-Based Revealed Comparative Advantage Analysis*

Another approach to measuring revealed comparative advantage is export-based revealed comparative advantage analysis (ESR) which compares a country's share of the world export market for a particular good with its share of the export market for all goods or goods of a certain type.³⁷

The intuition behind this formulation is quite straightforward: as a country's share of world exports of a good grows larger relative to its share of aggregate world exports, this reveals a comparative advantage in the production of that good. Unlike the NER, the ESR is always greater than zero, though it does not have an upper bound. An ESR less than 1 means that a country's share of world exports in a particular good is smaller than the country's share of all exports or all exports of a certain type and reveals a comparative disadvantage. On the other hand, as the ESR increases, more of a comparative advantage is revealed. It should be noted that the choice of what goods to aggregate for purposes of calculating a country's world share of

36. See YEATS, *supra* note 3, at 12.

37. See Bela Balassa, *The Changing Pattern of Comparative Advantage in Manufactured Goods*, 61 REV. ECON. & STAT. 259-66 (1979). See also, YEATS, *supra* note 3, at 11-13. This export share ratio (ESR) can be expressed through the following formula:

$$ESR = \frac{\frac{x_{ij}}{x_{wj}}}{\frac{\sum_j x_{ij}}{\sum_j x_{wj}}}$$

where x_{ij} = exports of good j from country or region i

x_{wj} = world exports of good j

aggregate exports can be potentially important, particularly for small countries. For example, a small country with a negligible share of total world trade that concentrates on exports of a few traditional exports may show extremely high levels of comparative advantage.³⁸ However, MERCOSUR's non-negligible share of world trade will permit aggregation over all goods.

V. EMPIRICAL RESULTS FOR MERCOSUR'S AUTOMOTIVE INDUSTRY

One of the main concerns raised by a customs union is whether its preferential trading arrangements divert trade away from non-members and back toward members. Thus, in the context of MERCOSUR, it is important to know whether its reduced tariffs have diverted trade. To answer this question in the context of the auto industry, this Article considers two sectors: passenger automobiles and automobile parts and accessories.³⁹

Figure 1⁴⁰ shows the rapid growth in intra-MERCOSUR exports that occurred from 1991 to 1996—a 400% increase.⁴¹ At first blush, Figure 1 seems to suggest that extra-MERCOSUR exports were diverted to members. However, 1991 was the first year in which MERCOSUR's trading preferences were in place. Thus, the decline in exports to non-MERCOSUR countries prior to 1991 cannot be explained by MERCOSUR's trading regime. Exports to non-members have actually remained stable at about \$250 million over the 1991-96 period, while intra-MERCOSUR exports have climbed to \$1.2 billion.⁴² Total exports thus have grown 250% from 1991 to 1996.⁴³ This growth was possible due

See GREENAWAY & MILNER, *supra* note 31.

38. See GREENAWAY & MILNER, *supra* note 31, at 186.

39. All the data in this paper were generated using the Standard International Trade Classification (SITC) Codes, Revision 3 for automobiles and automobile parts & accessories, which are 781 and 784, respectively. SITC Codes are available at the United Nations Computing Centre web site, <gopher://gopher.unicc.org:70/00/itc/dir3/dir31/file313.txt>.

40. See Figure 1 *infra* Appendix Part B.

41. Growth was computed by the author using data available from the Inter-American Development Bank, Intal Database (on file with author) [hereinafter Intal Database].

42. Calculated using data available from Intal Database, *supra* note 41.

43. *Id.*

to increases in capacity—for example Brazil and Argentina have increased their production of automobiles by 69% and 105%, respectively.⁴⁴ Thus, Brazilian and Argentine automobile producers are selling most of their products at home and in markets while exporting slightly less than the pre-MERCOSUR value to non-members.

While exports are an important indicator of competitiveness, they tell only part of the story. Specifically, the issue is whether the tremendous increase in intra-MERCOSUR exports has come at the expense of imports. Figure 2⁴⁵ shows that imports have gained significant access to markets. Imports of automobiles from non-MERCOSUR producers account for more than 60% of all imports.⁴⁶ In fact, the tremendous increase in imported autos into MERCOSUR is perhaps more noteworthy than the increase in intra-MERCOSUR trade. The value of imported autos into MERCOSUR increased about 500% to about \$1.9 billion over the 1991-96 period.⁴⁷ This represents a remarkable change from the late 1980s when tariff and non-tariff barriers kept all but a small number of imported automobiles out of countries. Therefore, to the extent that MERCOSUR was responsible for opening its members' auto markets, significant trade was created. Overall trade in automobiles increased about 380% to \$3.6 billion from 1991 to 1996.⁴⁸

A. MERCOSUR's Trade in Passenger Vehicles

To determine whether passenger automobile producers are competitive relative to world producers, net trade flows for the period 1987-96 are informative. These net trade flows are examined in Table 4.⁴⁹ As discussed above, the export and import figures reflect extra-MERCOSUR trade only, though it should be noted that including intra-MERCOSUR trade flows would only dampen, and would not substantially change, the following observed trends.⁵⁰

44. See ASOCIACION DE FABRICAS DE AUTOMORES 194-96, 200-203 (1996) [hereinafter ASSOCIATION OF AUTOMOBILE MANUFACTURERS].

45. See Figure 2 *infra* Appendix Part B.

46. Calculated using data available from Intal Database, *supra* note 41.

47. *Id.*

48. *Id.*

49. See Table 4 *infra* Appendix Part A.

50. This is because any inflation of exports through intra-MERCOSUR exports

First, as shown in Table 4, MERCOSUR's NER for the late 1980s was close to 1 which would normally suggest a strong comparative advantage in the production of automobiles. However, this surplus merely reflects how heavily protected South America's auto industry was in the late 1980s.

Second, starting in 1991, MERCOSUR has seen its NER continue to decline, as more exports went to members and fewer to non-members. The lowest NER for the period, -0.89 in 1995, suggests a severe comparative disadvantage. The increase in NER to -0.76 is largely explained by the increase in the Brazilian duty on imported autos from 32% to 70% in 1995.⁵¹ Thus, the opening of the automobile markets in MERCOSUR countries has revealed that its producers are not cost competitive with foreign producers.

This revealed comparative disadvantage can be confirmed by considering the ESR which, as discussed above, looks only at export performance in an industry relative to overall export performance. Table 5⁵² shows that MERCOSUR's share of world automobile exports remains well below its share of overall exports. For example, as shown in Table 5, in 1995, MERCOSUR exported only 0.33% of the world's auto exports⁵³, while, at the same time, accounting for 1.39% of all world exports. Indeed, MERCOSUR's ESR has steadily declined since 1992 and stood at only 0.24 in 1995. This low ESR confirms MERCOSUR's comparative disadvantage relative to foreign producers.

Disaggregated results for Brazil and Argentina are reported in Table 6⁵⁴. Although both countries have developed trade deficits with foreign producers, there are significant differences between their respective industries.

In the case of Brazil, some conclusions can be drawn about the competitiveness of Brazilian automobile producers after the founding of MERCOSUR and trade liberalization in the early 1990s. Brazil's trading deficit and NER with non-member countries for the period 1994-96—approximately \$2.5 billion—

would be balanced by intra-MERCOSUR imports.

51. Calculated using data available from Intal Databse, *supra* note 41.

52. See Table 5 *infra* Appendix Part A.

53. MERCOSUR's export figures are actually inflated because they include intra-MERCOSUR exports. Thus, these calculations are quite conservative.

54. See Table 6 *infra* Appendix Part A.

suggests that Brazilian producers are at a comparative disadvantage relative to foreign producers. This conclusion is buttressed by the fact that imports poured into Brazil after it decreased the effective rate of protection⁵⁵ for automobiles to 45% in the period 1992-94.⁵⁶ Thus, one could conclude that foreign-produced automobiles must be lower cost because they competed favorably with Brazilian cars even at relatively high, albeit historically lower, rates of protection.⁵⁷ The decrease in NER from 1995 to 1996 is likely explained largely by Brazil's unilateral increase in tariffs on imported automobiles of up to 70%⁵⁸, as imports fell by 64%⁵⁹ in response to the higher tariff. Thus, if the reduction in net export deficit for 1996 was simply a distortion in a trend toward greater import share of the Brazilian market, then one could conclude that Brazilian auto-makers are not internationally competitive. A more complete discussion of the competitiveness of the Brazilian auto sector is found in Section VI.B *infra*.

It is important to note that Brazil's revealed comparative disadvantage cannot be explained simply by the relative attractiveness of exporting to members. In other words, it is not that Brazil auto-makers *could* export more automobiles to non-members but instead opt for the higher profit margins in their own market and MERCOSUR markets. Rather, MERCOSUR seems to be virtually the only place where Brazilian automobiles can compete.⁶⁰ The response of Brazilian auto makers to the virtual collapse of the Brazilian automobile market in late 1997 confirms this lack of competitiveness. Instead of exporting the excess capacity abroad, the major manufacturers in Brazil simply chose to shut down their factories.⁶¹

55. In addition to tariffs, this figure includes non-tariff barriers including investment incentives such as favorable tax treatment.

56. LAIRD, *supra* note 6, at 13.

57. This conclusion depends on the crucial assumption that the prices of foreign-produced automobiles do not reflect subsidies at home. Thus, to the extent that foreign producers receive financial incentives through programs such as export credits or investment tax breaks at home, the conclusion is weakened and depends on the size of such subsidies.

58. *Finance and Economics: Murky Mercosur; Trade Agreements*, THE ECONOMIST, July 26, 1997, available in 1997 WL 13361122.

59. Calculated using data available from Intal Database, *supra* note 41.

60. Brazil does export a significant number of light commercial vehicles to Europe, particularly Italy. See ASSOCIATION OF AUTOMOBILE MANUFACTURERS, *supra* note 44, at 203.

61. See *Trouble in El Dorado*, THE ECONOMIST, Dec. 13, 1997, at 57.

The trade data in Table 6 permit stronger conclusions to be drawn about the Argentine automobile industry. Argentina's numbers after 1991 reflect the reduction in tariff—down to 11% by 1996—and NTBs that took place in the 1990-91 period. Thus, with its automobile market open, at least partially, for the first time, Argentina saw its net export deficit soar to \$1.4 billion and its NER fall to -0.947. Over the period 1992-95, Argentina had a net export deficit of \$3.4 billion and an average NER of -0.91. These numbers reveal a strong comparative disadvantage in the production of automobiles relative to foreign producers. In effect, nearly all (95% in 1995) of Argentina's exports of automobiles go to MERCOSUR members, particularly Brazil (90% in 1995) under their preferential trading arrangements.⁶² Thus, MERCOSUR has effectively created an export market for Argentine automobiles that did not exist previously.

The foregoing examination of net trade flows and MERCOSUR's declining NER and ESR reveals a lack of international competitiveness in the passenger vehicles sector.

B. MERCOSUR's Trade in Automobile Parts and Accessories

MERCOSUR's performance in the automobile parts and accessories (P&A) sector also reveals a lack of international competitiveness. However, its performance relative to the rest of the world's producers has been better than that of the automobile industry. Unlike the automobile industry, the P&A sector never exhibited substantial net export surpluses because it has always been less protected than the automobile sector.⁶³ The largest such surplus—an NER of .25—occurred in 1989.⁶⁴

Following trade liberalization and MERCOSUR's founding in 1991, the parts and accessories industry exported about as much as it imported, i.e., its NER hovered around zero.⁶⁵ As noted above, this NER suggests neither comparative advantage nor disadvantage. However, more recently, MERCOSUR's trade performance has not kept pace with its foreign competitors.

62. Calculated using data available from Intal Database, *supra* note 41.

63. Imports of parts and accessories were vital to support the main industrial policy goal of encouraging automobile production.

64. See Table 7 *infra* Appendix Part A.

65. See Table 8 *infra* Appendix Part A.

From 1993-96, foreign producers nearly doubled their imports to MERCOSUR, while exports grew by only about 20%.⁶⁶ With an average NER of about -0.16 over the 1994-96 period, MERCOSUR producers would seem to be at a slight comparative disadvantage relative to their foreign counterparts. Interpreting these data is complicated by the massive restructuring that has been taking place in the P&A sector. These sectoral changes are discussed in Section VI.C *infra*.

Similar to the passenger vehicles sector discussed above, disaggregating the data by country also reveals some significant differences between Brazil and Argentina's P&A trade performance.

In the case of Brazil, as Table 9⁶⁷ shows, its P&A industry has been much better at exporting products than its Argentine counterpart. During the 1987-91 period, Brazil tended to export almost twice as much in value of automobile P&A as it imported, as its NER was approximately 0.3.⁶⁸ The NER for this period is more meaningful than the NER for automobile trade because the P&A industry was not as heavily protected during this period. Thus, Brazil's P&A producers had demonstrated some ability to compete in international markets. MERCOSUR did not affect the Brazilian P&A industry to the same extent it did the automobile industry, as the P&A sector maintained a net export surplus with non-MERCOSUR countries through 1994. In contrast to auto-makers, Brazilian P&A manufacturers managed to continue exporting in significant quantities to non-MERCOSUR countries, even as its exports to MERCOSUR increased by more than 300% to \$500 million over the period.⁶⁹ Thus, there was remarkable trade creation in this sector—total trade increased from about \$1 billion in 1991 to more than \$3 billion in 1996.⁷⁰

The performance of the P&A industry in Argentina was weaker than in Brazil. The Argentine P&A industry has never had a net export surplus in trade, though its NER remained

66. Calculated using data available from Intal Database, *supra* note 41.

67. See Table 9 *infra* Appendix Part A.

68. This NER of 1/3 implies that exports are twice as large as imports. Algebraically, this can be shown by simply equating $(x-m)/(x+m)$ to 1/3 and solving for x , which yields $x = 2m$.

69. Calculated using data available from Intal Database, *supra* note 41.

70. *Id.*

below -0.5 from 1988-91. Although Argentina's overall trade in P&A with non-MERCOSUR countries increased about 130% (from about \$190 million to \$530 million) over the 1991-96 period, its trade with members increased by more than 900% (from about \$95 million to about \$970 million).⁷¹ Consequently, the Argentine industry's total trade with members is nearly double its trade with the rest of the world. Despite the increased exports to non-members, these data suggest that Argentine producers have no comparative advantage.

VI. INTERPRETING MERCOSUR'S TRADE PERFORMANCE

The relatively poor showing of exports in world markets suggests that MERCOSUR automobile producers are at a comparative disadvantage relative to non-member producers. The competitive situation for producers of automotive parts and accessories is better, though it demonstrates no real comparative advantage. With no comparative advantage, the question then arises as to why trade in automotive products has increased so dramatically among members. The simple answer, which will be explored in greater depth below, is that member exports face zero or, at least, much lower tariffs and need not match lower cost foreign producers. On the other hand, this simple story may be complicated by the structure of the automotive industry and potential economies of scale.

A. *Trade Barriers Facing Foreign Producers*

There can be little doubt that the tariff protection afforded members has altered trade patterns since 1991. After importing relatively few Brazilian automobiles prior to MERCOSUR, Argentina is now the primary destination for Brazilian cars.⁷² And the reverse is true for Brazil.⁷³ All else equal, this remarkable change must reflect a change in relative prices facing consumers, namely that the prices of Brazilian autos facing Argentines must have declined and vice versa. Prior to MERCOSUR one of the largest components of price for imports into Brazil and Argentina was the added cost of tariff and non-

71. *Id.*

72. *Id.*

73. *Id.*

tariff barriers. Thus, it can be inferred that post-MERCOSUR reductions in the cost of these barriers would cause relative prices to fall. Before reaching that conclusion, however, it is important to consider the changes that have taken place in the automotive trade regimes of members.

The automotive industries in Brazil and Argentina have always been considered vitally important for the economic health of the two countries. Prior to 1991, Argentina and Brazil protected their automobile industries by either banning most imports or achieving the same effect with extraordinarily high tariffs and NTBs.⁷⁴ Since 1991, Argentina and Brazil have had essentially a managed trade in automobiles. Under the Ouro Preto Agreement in 1994, automobiles were granted special treatment, and members postponed the establishment of a common policy on this sector until 1999. Until a common policy is established, both countries have agreed to recognize each other's automotive trade regime and have put in place a Compensated Exchange Regime that allows local manufacturers to import finished vehicles and components with reduced tariffs in an amount almost equal to what they export.⁷⁵

The response of import flows to changes in the tariff structure in Brazil has been swift and substantial.⁷⁶ The reductions in tariffs for imported passenger autos that took place over the 1991-95 period resulted in an increase in imports of about 1600% to \$3.4 billion. However, in late 1995, Brazil raised its tariff on automobiles through presidential decree from 32% to 70%.⁷⁷ At the same time, it adopted fiscal incentives to attract investments.⁷⁸ These measures were likely the main reason for the 63% decrease in the value of imports in 1996. Eventually, Brazil was forced to eliminate the quota regime in October 1995 after the World Trade Organization (WTO) balance of payments

74. For example, in Argentina, effective rates of protection were between 100% and 200%. Hernan Carbone & Jonathan Anderson, *Argentina: Automotive Industry Overview*, AIWISA, July 2, 1997, available in 1997 WL 9850590.

75. For a detailed description of the automotive industry in Argentina, see *id.*

76. See Figure 3 *infra* Appendix Part B.

77. George Kleinfeld & Deborah Wengel, *Foreign Investment*, 31 INT'L LAW. 403, 407 (1997) (quoting Comments of Honda North America, submitted to the Office of the U.S. Trade Representative, Docket 301-110, Nov. 8, 1996, at 1).

78. Mario Osava, *MERCOSUR: Automobiles at the Heart of the Common Market*, INTER PRESS SERVICE, Feb. 7, 1998, available in 1998 WL 5985725.

committee rejected Brazil's claim that the regime was necessary on balance of payments grounds.⁷⁹

Although Brazil's 1995 decree raised tariffs to 70%, it also provides relief to qualifying producers. Specifically, the decree allows qualifying producers to receive a reduction in duties of up to 90% on imports of capital goods and from 85% to 40% on duties of inputs.⁸⁰ Moreover, qualifying producers get a 50% reduction in tariffs on imported vehicles.⁸¹ To qualify, a producer must meet the following criteria: (1) domestic content requirement of 60%; (2) one-to-one ratios of imported capital goods to domestically produced capital goods and of domestically produced raw materials to imported raw materials; (3) imports of vehicles and inputs combined may not exceed its level of net exports; (4) imports of auto parts may not exceed two-thirds of net exports.⁸² This preferential arrangement can be enormously profitable for multinational producers. For example, Ford manufactures car stereos for export near the São Paulo airport and earns the right to import its high-value European-made automobile models at a lower tariff.⁸³

These Brazilian automotive investment trade policies have since come under attack in the WTO under the Agreement on Trade-Related Investment Measures.⁸⁴ The issues are perhaps best illustrated by the invited comments made by American auto makers to the U.S. Trade Representative regarding Brazilian trade practices in the automotive industry.⁸⁵ General Motors (GM), which has substantial manufacturing capacity in Brazil and qualifies for reduced tariffs under the Brazilian trade regime, took the view that the regime favored GM and therefore benefited the United States.⁸⁶ In contrast, Honda, which has

79. See OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE, 1996 INVENTORY OF FOREIGN TRADE BARRIERS 24 (1996).

80. Kleinfeld & Wengel, *supra* note 77, at 406.

81. *Id.*

82. *Id.*

83. See *Trouble in El Dorado*, *supra* note 61, at 58.

84. Both the United States and Japan have filed complaints with respect to Brazil's trade policies in the automotive industry. Kleinfeld & Wengel, *supra* note 77, at 406.

85. Initiation [sic] of Section 302 Investigation and Request for Public Comment; Practices of the Government of Brazil Regarding Trade and Investment in the Auto Sector, 61 Fed. Reg. 54,485 (1996).

86. See Comments of General Motors, submitted to the Office of the U.S. Trade Representative, Docket 301-110, Nov. 6, 1996, cited in Kleinfeld & Wengel, *supra* note 77, at 407 n.19.

virtually no production capacity in Brazil and instead exports to Brazil from its Ohio plant, criticized the Brazilian trade regime for violating "accepted principles of international trade and investment."⁸⁷

The most recent agreement between Brazil and Argentina, signed in January 1996, continues the Compensated Exchange Regime by allowing for automobiles and parts to be imported duty free so long as the importer balances these imports with exports to any destination.⁸⁸ It also contains a side letter that calls for the duty-free importation by Brazil of about 85,000 cars from Argentina between 1996 and 1998 to remedy a trade deficit of \$850 million that had accumulated during the 1992-94 period.⁸⁹ This agreement clearly favors not only local production of automobiles but also dual production in Brazil and Argentina to take advantage of reduced duties and the Compensated Exchange Regime. This agreement does not seem to affect the CET and timetable previously agreed upon. Thus, Brazil is obligated to bring its 70% tariff down to 20% according to the schedule in Table 10⁹⁰, while Argentina is obligated to bring its 11% tariff up to 20% by 2000.⁹¹ However, auto industry insiders do not believe that Brazil will ever reach the 20% CET because its industry will not be competitive at that rate. They instead believe the CET will be set around 30%.⁹²

B. The Structure of MERCOSUR's Automotive Industry

The auto industry in South America was once considered a "backwater where international car firms assembled hand-me-down, discarded models from Europe or America."⁹³ In the 1990s, however, this backwater became the darling of European and American multinational car manufacturers. In particular, the 1993-97 period has witnessed tremendous growth in the automobile industry in both Brazil and Argentina. The

87. See Kleinfeld & Wengel, *supra* note 77, at 406-407.

88. See WORLD TRADE ORGANIZATION, TRADE POLICY REVIEW OF BRAZIL 145 (1996).

89. See *id.*

90. See Table 10 *infra* Appendix Part A.

91. See Carbone & Anderson, *supra* note 74, at *5.

92. See WARD'S AUTOMOTIVE Y.B. 98 (1996).

93. See *Trouble in El Dorado*, *supra* note 61, at 57.

automobile industry is composed almost entirely of multinational companies⁹⁴ who have invested more than \$15 billion over the 1992-97 period.⁹⁵

Brazil has attracted investment in its auto industry. In addition to the "big four" manufacturers in Brazil—Volkswagen, Fiat, General Motors and Ford—nearly every major auto maker including Honda, Toyota, Chrysler, Renault, Peugeot, Asia Motors, and BMW have either invested in Brazil or have announced investments.⁹⁶ These investments are expected to expand the industry's production capacity by 25% to 2.5 million vehicles by the year 2000.⁹⁷

Argentina's auto industry has also attracted significant amounts of foreign direct investment (FDI) from foreign auto-makers since 1991.⁹⁸ Currently, foreign car manufacturers or their licensees in Argentina include Volkswagen, Ford, Renault (through a licensee), Peugeot (through a licensee), General Motors, and Mercedes Benz.⁹⁹ In addition, investments by Chrysler and Toyota have been announced.¹⁰⁰ Total FDI in the automobile sector is expected to exceed \$5 billion by the end of the 1990s.¹⁰¹

For foreign auto makers, the preferential treatment given to imports by local manufacturers has made dual operation in Brazil and Argentina the norm.¹⁰² The pattern emerging is that higher valued models are produced in Argentina at lower volumes while Brazilian plants produce higher volume models.¹⁰³ For example, Brazil has increased its production of low end station wagons for export to Argentina, while Argentina has increased its production of higher-end sedans for export to Brazil.

94. See Table 11 *infra* Appendix Part A.

95. *Trouble in El Dorado*, *supra* note 61, at 58.

96. See Jonathan Wheatley, *Multinationals taking over: local manufacturers fight a losing battle*, FIN. TIMES, Feb. 23, 1998, at 5.

97. See *id.*

98. Carbone & Anderson, *supra* note 74, at *3.

99. *Id.* at *2.

100. *Id.*

101. *Id.* at *3.

102. See Wheatley, *supra* note 96, at 5. An added, albeit temporary, incentive for manufacturers to increase capacity in Argentina was Argentina's outstanding trade deficit with Brazil. Under the terms of the most recent auto agreement between Brazil and Argentina, Brazil must absorb 85,000 Argentine automobiles by the end of 1998. LAIRD, *supra* note 6, at 19.

103. See Wheatley, *supra* note 96, at 5.

Thus, local automobile producers have adjusted their production choices to take advantage of the managed trade regime, as well as the differential costs of production in Brazil and Argentina.

The changes wrought by the opening of MERCOSUR's automobile market to foreign producers and the subsequent competitive pressures on local producers have also rippled through the automotive P&A industry. There has been significant FDI and a remarkable restructuring in the P&A industry in both Brazil and Argentina. In Brazil, most local producers have either been absorbed by foreign competition or simply closed their doors.¹⁰⁴ Whereas Brazil once had more than 1,000 first tier suppliers, it now has about 500, and knowledgeable observers expect the number to fall to between 200 and 300 by the end of the decade.¹⁰⁵

This restructuring in the P&A sector is driven largely by two trends shaping the international market. First, global car manufacturers now demand "global sourcing," which places reliance on fewer, more efficient suppliers of standard parts to factories around the globe.¹⁰⁶ Consequently, auto parts manufacturers can be competitive only through economies of scale. Second, automobile manufacturers now require that parts producers supply more modular units, e.g., completed systems of components rather than individual components.¹⁰⁷ The fact that both trends are playing out in Brazil's P&A sector bodes well for the sector's future competitiveness. However, the short term will not be without dislocation costs because acquisitions and closures will certainly reduce employment in the sector.

C. Economies of Scale and Productivity

The promise of economies of scale and increased factor productivity has driven industrial and trade policy in South America since the 1960s. However, achieving economies of scale against competitors who have already achieved them creates a bootstrapping kind of problem: economies of scale are only achievable through large volume; yet, large volume is only

104. *See id.*

105. *See id.*

106. *See Road kill: Specialized part suppliers are the early fatalities in an evolving car industry*, BUSINESS LATIN AMERICA, July 14, 1997, at 6.

107. *Id.*

possible if goods are competitively priced, i.e., if economies of scale have already been achieved. Even after substantial growth in production capacity in the 1991-95 period¹⁰⁸, the volume of automobile production still lags that of foreign producers by orders of magnitude.

A greater problem facing Brazilian producers is that auto manufacturing is extremely capital-intensive—about 22% more capital-intensive than the average for all manufacturing—while its historical advantage has been in more labor-intensive sectors.¹⁰⁹ The only way out of this predicament is government subsidization or some other form of protection. Until liberalization in the early 1990s, Brazil preserved its automobile market for domestic producers through its high tariffs on imports.¹¹⁰ This protection, however, led to neither economies of scale nor increased productivity relative to world producers. Production stagnated at about one million units until 1992¹¹¹, and productivity significantly lagged that of the world's leading auto producers, as Brazilian producers had little incentive to adopt the best practices of foreign producers.¹¹² Thus, placing high tariffs on imports is not a viable option.

The creation of MERCOSUR enlarged the relatively captive market for both Brazilian and Argentine producers. As Figure 4¹¹³ shows, MERCOSUR has increased its production capacity by about 70% from 1991 to 1995. However, the elimination of import restrictions and reductions in tariffs and NTBs in the early 1990s exposed producers to the competitive force of best practices production for the first time. Assessing the extent to which producers have responded to this challenge by becoming more competitive relative to foreign manufacturers is quite difficult. However, a recent McKinsey study provides some valuable insights. First, total factor productivity in Brazil's passenger vehicle sector is about 52% of U.S. levels, while labor

108. See Figure 4 *infra* Appendix Part B.

109. See ALEXANDER YEATS, THE WORLD BANK, POLICY, PLANNING AND RESEARCH WORKING PAPER NO. 165, SHIFTING PATTERNS OF COMPARATIVE ADVANTAGE: MANUFACTURED EXPORTS OF DEVELOPING COUNTRIES (1989).

110. See McKinsey Global Institute, *Productivity: The Key to an Accelerated Development Path for Brazil*, São Paulo and Washington, D.C. (forthcoming) (manuscript at 7, on file with the *Inter-American Law Review*) [hereinafter McKinsey Report].

111. See ASSOCIATION OF AUTOMOBILE MANUFACTURERS, *supra* note 44, at 200.

112. McKinsey Report, *supra* note 110, at 4-5.

113. See Figure 4 *infra* Appendix Part B.

productivity in the Brazilian auto industry stands at about 30% of U.S. levels and only 21% of Japanese levels.¹¹⁴ Second, the Brazilian auto industry has invested less than half the capital per employee as has been invested by the United States industry.¹¹⁵ However, the prospects for auto producers are potentially bright because foreign competition will continue to prod local producers to adopt better, more efficient practices including the use of more automated technology.¹¹⁶ The McKinsey report concludes that Brazilian producers could potentially achieve international competitiveness by the time tariff rates converge to the CET in 2000.¹¹⁷

VII. POLICY IMPLICATIONS

A. *Did MERCOSUR Create Any Losers?*

Assessing the overall social welfare effects of MERCOSUR in the automotive industry requires adding up the costs of trade diversion and comparing them to the benefits of trade creation.¹¹⁸ The analysis above shows that members have increased their trade with members and non-members alike. Thus, the treatment of the automotive sector in MERCOSUR (again, to the extent that it was responsible for economic liberalization) has increased social welfare. Moreover, if one compares the auto trade regime with the pre-MERCOSUR regime, rather than with some free trade counterfactual¹¹⁹, automotive trade policy may

114. See McKinsey Report, *supra* note 110, at 4-5. In contrast, capital productivity is actually 172% that of U.S. producers. *Id.* As the McKinsey report notes, however, this higher capital productivity reflects more an under-investment in capital by Brazilian producers than any superior use of capital. *See id.*

115. *See id.* at 14.

116. *See id.* at 18.

117. *Id.*

118. This cost-benefit approach implicitly uses the Kaldor-Hicks efficiency criterion, i.e., are the benefits large enough to compensate for the losses? In other words, the distribution of the gains does not matter.

119. A more subtle criticism might be that MERCOSUR is not as desirable as a free trade agreement along the lines of the NAFTA. However, "on welfare grounds, a free trade arrangement can yield no benefits that are not attainable under a customs union, and can generate additional welfare costs that are not incurred under customs union." ANNE O. KRUEGER, NATIONAL BUREAU OF ECONOMIC RESEARCH, INC. WORKING PAPER NO. 5084, FREE TRADE AGREEMENTS VERSUS CUSTOMS UNIONS 4 (1985). A reason for this is that a customs union's common external tariff eliminates the need to monitor the borders among member countries. *Id.* at 12-17. In contrast, the differential tariffs of the

actually represent a Pareto-improvement.¹²⁰ To see how this is possible, the four main constituencies affected by the changes in the automobile trade regime will be considered: consumers, local producers, foreign producers, and auto workers.

Considering MERCOSUR's consumers first, there is no doubt that the opening of the automobile market to imports has benefited consumers. Car prices have steadily dropped in both Brazil and Argentina, while selection and quality have increased.¹²¹ Argentine consumers no longer have to wait months to take delivery of a car of questionable quality; today, they can choose from the latest models and drive one off the lot.¹²² It is important to note that consumers are not as well off as they *could* be because they are still paying more than they would under a free trade regime. However, consumers are better off than they would be if the pre-MERCOSUR regime, with its virtual ban on imports, were still in place.

While the inflow of imports has benefited consumers, the MERCOSUR regime still protects local producers.¹²³ In fact, "[t]he tariff preferences generated by the regional integration process has heavily benefited the businesses operating in the region."¹²⁴ The Compensated Exchange Regime between Argentina and Brazil has allowed producers in those countries to take advantage of the growing demand in each other's markets.¹²⁵ These producers have also been able to import on more favorable terms, thus profiting from a kind of tariff arbitrage. In addition, producers with dual production in Brazil and Argentina have been able to achieve some second-best efficiencies by altering their production mix in each country based on relative cost differences. The gush of investment into MERCOSUR by multinational auto manufacturers is perhaps the strongest evi-

NAFTA members requires that they monitor goods passing among themselves to make sure that goods are not simply exported to the member with the lowest tariff for re-export to the other members. *See id.*

120. A Pareto-improvement is a change that leaves at least one party better off and no party worse off. HAL R. VARIAN, MICROECONOMIC ANALYSIS 225 (3d ed. 1992).

121. *See* Carbone & Anderson, *supra* note 74, at *15.

122. *See id.* at *3.

123. *Id.* at *14. Local producers is a bit of a misnomer here. The term actually refers to multinational auto-makers with production capacity in a MERCOSUR member country.

124. *Id.* at *17.

125. *Id.* at *15.

dence that local producers benefit from MERCOSUR's trade policy.

The picture is not as rosy for foreign producers without production capacity in MERCOSUR. For example, Japanese producers have been slow to invest in local production.¹²⁶ They have also been perhaps the strongest critics of MERCOSUR.¹²⁷ These producers clearly would prefer to produce their goods outside, where their costs are cheaper, and export to MERCOSUR. Thus, foreign producers with cost advantages would be better off under a free trade regime. Nonetheless, these same producers are better off now than they were under pre-MERCOSUR's virtual ban on imports because at least they can export some cars.

The last constituency to consider, and it is by no means unimportant in MERCOSUR countries, is labor. Employment in the industry has declined steadily since 1990 while output is increasing, which simply reflects increases in productivity.¹²⁸ However, real wages in the industry have increased about 22% since 1990.¹²⁹ Thus, if the effects of MERCOSUR on labor is measured solely by total employment, workers as a group were made worse off by MERCOSUR's trading regime. On the other hand, if increasing real wages in the industry are instead considered, workers benefited from the new trade regime.¹³⁰

The liberalization of trade in the automotive sector has had enormous benefits and relatively minor costs. Gains to consumers through lower prices and improved quality likely dwarf any welfare losses to displaced auto workers. Moreover, local and foreign producers alike are much happier with the regime than they were with the pre-regime.

126. *Trouble in El Dorado*, *supra* note 61, at 58.

127. See Kleinfeld & Wengel, *supra* note 77, at 406-407. Honda North America, which has yet to invest in local production and continues to export automobiles from assembly plants in the United States to Brazil, has criticized Brazilian measures under MERCOSUR to increase its duty on automobiles and impose additional trade restrictions. *Id.*

128. See McKinsey Report, *supra* note 110, at 2-3, Exhibit 4.

129. *Id.*

130. In any case, this is not a purely Pareto-improving change because at least one person (the worker that lost their job) is left worse off by the change.

*B. The Persistence of Industrial Policy-Making in
MERCOSUR'S Auto Industry*

There is no divorcing the economics of the automotive industry in South America from its industrial *realpolitik*. Despite the seismic shift toward economic liberalization and market reform, Brazil and Argentina are simply not willing to let the market's invisible hand determine the fate of their automobile industries. The political dynamic in Brazil and Argentina—the strongly represented auto lobby and relatively weakly represented consumer interests—requires politicians and policy makers to pay close attention to the industry. Moreover, vestiges of old-style industrial planning, particularly the focus on quantity and production capacity rather than profitability, persist and continue to drive policy. This emphasis on scale economies will continue to lead to tinkering with producer incentives through taxes and government programs. Thus, the political economy of the industry will likely result in higher than expected tariffs and continued use of NTBs.¹³¹ It has been suggested that the Brazilian government will not lower tariffs and NTBs to imports until Japanese car manufacturers, the wariest of foreign producers, invest locally in production facilities on a scale that will require no imports.¹³²

MERCOSUR essentially has a balancing act to perform: keep tariffs and NTBs high enough to keep local producers in business but keep them low enough to promote foreign competition and increased productivity at home. The McKinsey study concluded that Brazil's proposed schedule of convergence to the CET¹³³ will encourage enough competition and increased productivity to enable Brazilian automobiles to be cost-competitive with imports from the United States and Japan at a CET of 20% in 2000. However, given Brazil's unilateral increase in tariffs in 1995, one would not expect Brazilian trade policy makers to sit idly by should Brazilian producers fail to achieve international competitiveness.

131. It has already been suggested that the MERCOSUR target common external tariff of 20% will never be acceptable to Brazil because its producers would simply not be competitive without greater protection.

132. See *Trouble in El Dorado*, *supra* note 61, at 58.

133. See Table 10 *infra* Appendix Part A.

VIII. CONCLUSION

Trade among MERCOSUR's members and with non-members has increased dramatically since 1991. Much of the increase in intra-MERCOSUR trade is attributable to the elimination or reduction in tariff and non-tariff barriers. The increase in trade with the rest of the world is also due to the reductions in trade barriers that grew out of trade liberalization policies of the early 1990s. The pattern of member trade with non-members in the automotive sector suggests that producers in the automotive sector are not competitive with foreign producers due largely to low labor productivity. Although productivity has been improving, producers are not able to compete with foreign producers without some form of protection.

Protection through tariff and NTBs is clearly not the optimal policy prescription from an economic standpoint. Economic efficiency would dictate that MERCOSUR simply open its markets to non-member producers on a non-discriminatory basis and let the market sort out comparative advantages. Moreover, even if producers eventually achieve economies of scale and global competitiveness, they will likely never recoup the losses in social welfare that higher auto prices have imposed on consumers. However, it must clearly be understood as a kind of "second best" solution to a political economy that demands both the existence of an auto industry and a continued role for industrial planning of the industry. The liberalization of trade with non-members and the subsequent flood of imports was politically possible only because members, particularly Brazil, saw the size of their protected markets grow. In light of this industrial *realpolitik* and the extreme protection of the auto industry by countries before 1991, MERCOSUR is surely a step in the right direction.

IX. APPENDIX

A. Tables

Table 1
MERCOSUR 1995 Tariff Structure and
Final Common External Tariff (CET) (2001/2006) (percent)

| <i>Commodity</i> | <i>Argentina</i> | <i>Brazil</i> | <i>Paraguay</i> | <i>Uruguay</i> | <i>Avg.</i> | <i>Final</i> |
|----------------------|------------------|---------------|-----------------|----------------|-------------|--------------|
| Agricultural | 7.0 | 7.0 | 6.9 | 6.9 | 7.0 | 7.0 |
| Mining | 3.4 | 3.6 | 3.4 | 3.4 | 3.5 | 3.4 |
| Manufacturing | 10.8 | 12.3 | 9.6 | 11.1 | 11.0 | 11.5 |
| Total | 10.5 | 11.9 | 9.4 | 10.8 | 10.7 | 11.2 |

| | EXPORTS | | | IMPORTS | | |
|------|----------------------------|---|---|----------------------------|---|---|
| | <i>World (US \$b.)</i> | <i>Intra- MERC OSUR (%)</i> | <i>Extra- MERC OSUR (%)</i> | <i>World (US \$b.)</i> | <i>Intra- MERC OSUR (%)</i> | <i>Extra- MERC OSUR (%)</i> |
| 1986 | 30.5 | 8.6 | 91.4 | 21.7 | 12.3 | 87.7 |
| 1987 | 34.1 | 7.4 | 92.6 | 24.1 | 10.8 | 89.2 |
| 1988 | 44.9 | 6.6 | 93.4 | 23.1 | 13.2 | 86.8 |
| 1989 | 46.5 | 8.2 | 91.8 | 26.1 | 15.1 | 84.9 |
| 1990 | 46.4 | 8.9 | 91.1 | 29.3 | 14.5 | 85.5 |
| 1991 | 45.9 | 11.1 | 88.9 | 34.3 | 15.3 | 84.7 |
| 1992 | 50.5 | 14.3 | 85.7 | 40.6 | 18.4 | 81.6 |
| 1993 | 54.1 | 18.5 | 81.5 | 48.1 | 19.6 | 80.4 |
| 1994 | 61.9 | 19.5 | 80.5 | 62.2 | 19.9 | 80.1 |
| 1995 | 70.0 | 20.5 | 79.5 | 79.9 | 18.1 | 81.9 |

Source: Derived from United Nations Comtrade statistics (on file with author) [hereinafter UN Comtrade statistics].

Table 3
Rate of Integration^a for MERCOSUR

| <i>Grouping</i> | <i>1980-90</i> | <i>1991-95</i> | <i>Change^b</i> | <i>% Change^c</i> |
|-------------------|----------------|----------------|---------------------------|-----------------------------|
| World | 1.1 | 13.1 | 12.0 | 1090% |
| MERCOSUR | 2.4 | 24.7 | 22.3 | 929% |
| Rest of the World | 0.9 | 11.0 | 10.1 | 1122% |

^a The rate of integration is the difference between rate of growth in total trade and GDP growth.

^b Variation between the two periods.

^c Variation in percentage terms between the two periods.

Source: MARCELO OLARREAGA & ISIDRO SOLOAGA, WORLD TRADE ORGANIZATION, STAFF WORKING PAPER ERAD-97-003, ENDOGENOUS TARIFF FORMATION 29 (1997).

Table 4
MERCOSUR's Passenger Automobile Trade with Non-Members
(US \$ millions)

| | <i>Exports</i> (X) | <i>Imports</i> (M) | <i>X+M</i> | <i>X-M</i> | <i>NER</i> |
|------|-----------------------|-----------------------|------------|------------|------------|
| 1987 | 1,519 | 67 | 1,586 | 1,452 | 0.92 |
| 1988 | 1,637 | 52 | 1,689 | 1,584 | 0.94 |
| 1989 | 745 | 52 | 797 | 693 | 0.87 |
| 1990 | 398 | 73 | 472 | 325 | 0.69 |
| 1991 | 195 | 296 | 491 | -101 | -0.21 |
| 1992 | 298 | 728 | 1,026 | -429 | -0.42 |
| 1993 | 243 | 1,201 | 1,444 | -958 | -0.66 |
| 1994 | 235 | 2,629 | 2,864 | -2,394 | -0.84 |
| 1995 | 212 | 3,628 | 3,840 | -3,416 | -0.89 |
| 1996 | 256 | 1,880 | 2,136 | -1,623 | -0.76 |

Source: Inter-American Development Bank, Intal Database (1998) (on file with author) [hereinafter IADB Intal Database].

Table 5
MERCOSUR's Share of World Automobile and Total Exports

| <i>Year</i> | <i>Share of World Auto Exports (A)</i> | <i>Share of Total Exports (B)</i> | <i>Export Share Ratio (A/B)</i> |
|-----------------------------------|--|---------------------------------------|-------------------------------------|
| 1992 | 0.46% | 1.31% | 0.35 |
| 1993 | 0.48% | 1.45% | 0.33 |
| 1994 | 0.43% | 1.46% | 0.29 |
| 1995 | 0.33% | 1.39% | 0.24 |
| 1996 | 0.63% | * | * |
| *Data not available for this year | | | |
| Source: UN Comtrade statistics. | | | |

Table 6
Extra-MERCOSUR Automobile Trade and Net Export
Ratio
For MERCOSUR Automobile Producers

| | <i>Brazil</i> | | <i>Argentina</i> | |
|-------------|---|------------|---|------------|
| <i>Year</i> | <i>Net Exports (US \$ millions)</i> | <i>NER</i> | <i>Net Exports (US \$ millions)</i> | <i>NER</i> |
| 1987 | 1,523 | 0.989 | -12 | -0.206 |
| 1988 | 1,625 | 0.997 | 40 | 0.709 |
| 1989 | 1,975 | 0.987 | 32 | 0.586 |
| 1990 | 1,255 | 0.906 | 17 | 0.397 |
| 1991 | 936 | 0.703 | -74 | -0.453 |
| 1992 | 990 | 0.620 | -449 | -0.876 |
| 1993 | 361 | 0.187 | -599 | -0.922 |
| 1994 | -614 | -0.210 | -1,452 | -0.947 |
| 1995 | -2,523 | -0.576 | -854 | -0.894 |
| 1996 | -433 | -0.208 | * | * |

*Disaggregated data for Argentina not available for 1996.

Source: IADB Intal Database.

Table 7
 MERCOSUR's Trade in Automotive Parts and
 Accessories with
 non-Members 1987-96 (\$ US millions)

| | <i>X</i> | <i>M</i> | <i>X+M</i> | <i>X-M</i> | <i>NER</i> |
|------|----------|----------|------------|------------|------------|
| 1987 | 500 | 470 | 970 | 31 | 0.03 |
| 1988 | 572 | 409 | 981 | 163 | 0.17 |
| 1989 | 606 | 386 | 992 | 220 | 0.22 |
| 1990 | 608 | 409 | 1,017 | 198 | 0.20 |
| 1991 | 612 | 481 | 1,092 | 131 | 0.12 |
| 1992 | 833 | 727 | 1,560 | 107 | 0.07 |
| 1993 | 881 | 971 | 1,852 | -90 | -0.05 |
| 1994 | 986 | 1,236 | 2,222 | -250 | -0.11 |
| 1995 | 1,039 | 1,326 | 2,365 | -287 | -0.12 |
| 1996 | 996 | 1,806 | 2,802 | -809 | -0.29 |

Source: IADB Intal Database.

Table 8
MERCOSUR's Share of World Automobile P&A and
Total Exports

| <i>Year</i> | <i>Share of World P&A Exports (A)</i> | <i>Share of Total Exports (B)</i> | <i>Export Share Ratio (A/B)</i> |
|-------------|---|---------------------------------------|-------------------------------------|
| 1992 | 1.38% | 1.31% | 1.06 |
| 1993 | 1.85% | 1.45% | 1.27 |
| 1994 | 1.86% | 1.46% | 1.27 |
| 1995 | 1.72% | 1.39% | 1.24 |
| 1996 | 1.75% | * | * |

*Data not available for this year.

Source: UN Comtrade statistics.

Table 9
Extra-MERCOSUR Automobile P&A Trade and
Net Export Ratio
For Automobile P&A Producers

| | <i>Brazil</i> | | <i>Argentina</i> | |
|-------------|---|------------|---|------------|
| <i>Year</i> | <i>Net Exports (\$ US millions)</i> | <i>NER</i> | <i>Net Exports (\$ US millions)</i> | <i>NER</i> |
| 1987 | 200 | 0.271 | -163 | -0.730 |
| 1988 | 234 | 0.290 | -63 | -0.379 |
| 1989 | 257 | 0.312 | -30 | -0.185 |
| 1990 | 214 | 0.252 | -7 | -0.042 |
| 1991 | 217 | 0.247 | -67 | -0.348 |
| 1992 | 337 | 0.302 | -214 | -0.502 |
| 1993 | 221 | 0.160 | -294 | -0.647 |
| 1994 | 144 | 0.085 | -376 | -0.751 |
| 1995 | 7 | 0.004 | -273 | -0.631 |
| 1996 | -413 | -0.183 | -380 | -0.716 |

Source: IADB Intal Database.

Table 10
Brazil's Proposed Automobile Tariff Schedule

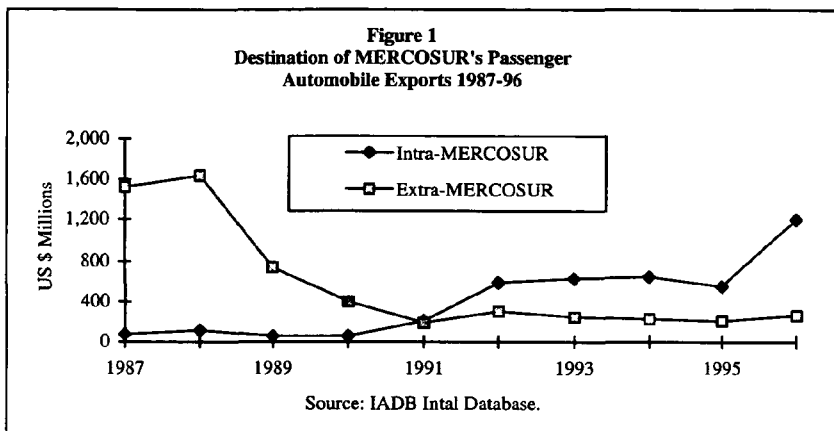
| <i>Year</i> | <i>Import Tariff (%)</i> |
|-------------|--------------------------|
| 1996 | 70 |
| 1997 | 63 |
| 1998 | 49 |
| 1999 | 35 |
| 2000 | 20 |

Source: Compiled from various World Trade Organization documents (1997) (on file with author).

Table 11
Production Shares of Major Automobile Producers in
Brazil and Argentina 1994-95

| | <i>Argentina</i> | <i>Brazil</i> |
|----------------------|------------------|---------------|
| Volkswagen | 27% [†] | 35% |
| Fiat | - | 30% |
| General Motors | 2% | 20% |
| Ford | 27% [†] | 12% |
| Renault | 25% | - |
| Peugeot [‡] | 43% | - |

[†] Volkswagen and Ford produced vehicles through their joint venture Autolatina until 1997.
[‡] Peugeot automobiles were produced by licensee Sevel until 1997.
Source: ASSOCIATION OF AUTOMOBILE MANUFACTURERS (1996).

B. Figures

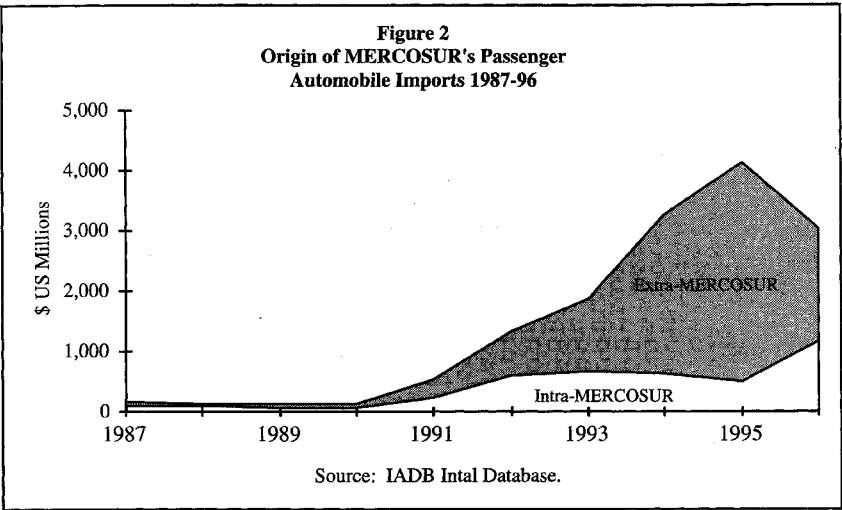
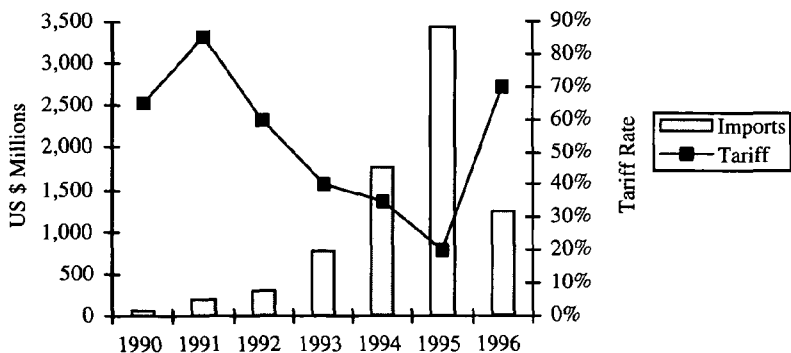


Figure 3
Imports of Passenger Vehicles and Tariff Rates in Brazil



Source: Import data computed from the IADB Intal Database.
Tariff data computed from various sources of the World Trade
Organization (on file with author).

Figure 4
Auto Production in Argentina and Brazil 1991-95

