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# MERCOSUR-EU trade: The impact of adverse macroeconomic developments and trade barriers on MERCOSUR exports

by

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***Abstract***

*This article examines sectoral MERCOSUR exports to the EU in the period of 1988 to 1996. A sectoral study is considered indispensable since tariff and non-tariff trade barriers vary strongly among sectors. The empirical investigation is based on both a dynamic panel analysis and a rather qualitative evaluation of the extent of tariff and non-tariff barriers imposed by the EU. The ex-post analysis for the period of 1988 to 1996 revealed three things: First, a more competitive real exchange rate could contribute to a better MERCOSUR export performance. Second, EU protection has had in general a very negative impact on MERCOSUR export growth rates. Third, EU protection strongly affected MERCOSUR's largest export sectors.*

Key words: sectoral Mercosur-EU trade; dynamic panel analysis; impact of tariff and non-tariff trade barriers
LEL classification: F14

## 1. Introduction

The Latin American countries have a long history of trade with European countries. In the period of 1988 to 1996 MERCOSUR's main trading partner was the European Union (EU), followed by the U.S.A. The strength of MERCOSUR's export sectors was quite heterogeneous in this time lapse. Export strength, as measured by sectoral export shares and sectoral growth rates, varied widely from sector to sector.[1] Total exports from the MERCOSUR to the EU and the U.S.A. grew very slowly, but at similar rates. According to OECD trade data, the growth of exports to the EU stood at an annual rate of 1.61 percent, whereas total exports to the U.S.A. expanded at a slightly higher rate, namely 1.90 per cent.

However, since 1994 exports to the U.S.A. have been more stable and yielded continuously positive annual growth rates. Since then it is fair to say that the orientation of MERCOSUR countries' exports towards the US-market has increased, whereas MERCOSUR's exports to the EU have lost ground. Several factors influenced this development: Trade talks between the U.S.A. and the MERCOSUR, better market access in general to the US market and a more dynamic and faster growing US economy.

[1] The growth rates of sectoral exports can be very different from total export growth! Especially very small sectors grew tremendously in the period under study, but obtained only very small weights in the calculation of the growth rates of TOTAL exports. Exports were measured in current US$.

As far as trade talks between the U.S.A. and the MERCOSUR are concerned, there were intensive talks about 'Free Trade in the Americas' at the Summit of the Americas in 1994. The objective was to integrate the economies of the Western Hemisphere into a single free trade arrangement (FTAA). It has to be admitted that from today's point of view there remains a long way to go to reach this goal.

In contrast to this development, the EU apparently started trade negotiations with the MERCOSUR only in reaction to the ongoing talks and negotiations between the U.S.A. and Latin American countries. In 1995 the EU and the MERCOSUR signed an Interregional Framework Agreement aimed at fostering economic co-operation and closer trade relations, with the ambitious objective of reaching a Free Trade Agreement in 2005. Up to now the talks, which are necessary for preparing such a Free Trade Agreement, have not been substantive.

Another reason for the strengthening of MERCOSUR's exports to the U.S.A. is a relatively better access to US agricultural markets. The EU is renowned for having the highest level of protection (after Japan) with respect to agricultural products. The Common Agricultural Policy (CAP) of the EU disposes of a huge budget which is partly used to limit agricultural imports.

Furthermore, the US economy grew on average faster than the EU economies in the last two decades, thus generating more demand for MERCOSUR's exports. The export growth of income-elastic products is dependent on fast growing markets of potential importers.

Nonetheless**,** the MERCOSUR countries have a vital interest in good trade relations with the EU and the EU is also eager not to lose the Latin American market which is interesting as an export market for goods and services and as a platform for investment.

In this study, past and future MERCOSUR-EU trade relations will be evaluated. MERCOSUR's past exports to the EU under the protectionist environment of the period of 1988 to 1996 will be examined and an attempt will be made to determine MERCOSUR's exports' growth potential in the EU market.[2] Five countries will be investigated, the four formal members of the MERCOSUR: Argentina (AR), Brazil (BR), Paraguay (PY) and Uruguay (UR), and Chile (CH), which became an

[2] The MERCOSUR countries have a dominant net export position as far as agricultural trade is concerned. They dominate temperate export products (Valdés, 2002).

associated MERCOSUR country in 1996. Bolivia, which signed an association agreement with the MERCOSUR in 1995, was not sampled due to incomplete OECD data and due to its small economic size: Chile's contribution to MERCOSUR exports was 18.3% in 1996, whereas Bolivia's share was 1.3% in the same year.

The sample period for which OECD export data are used runs from 1988 to 1996. The investigation is performed on a sectoral level (69 sectors, SITC Revision 2). The empirical investigation is based on a dynamic panel analysis. A sectoral study is considered indispensable since tariff and non-tariff trade barriers vary strongly among sectors. In this investigation emphasis is put both on an analysis on the general real exchange rate elasticity of each single sector and its dependence on the European business cycle, and a rather qualitative evaluation of the extent of tariff and non-tariff barriers imposed by the EU.

For this purpose, it is necessary to identify those sectors which are affected most by changes of the exchange rate and international differentials in the inflation rate, the business cycle, and trade barriers. It is assumed that sectors which react in a price elastic way will be hindered by an unstable, appreciated real exchange rate. They will be impeded also by tariff-barriers that have an impact on relative prices (tariffs and subsidies)[3]. It is further assumed that sectors which depend strongly on the business cycle of the European importers will suffer from a recession and profit from a boom in the EU. Finally, it is suggested that sectors which are harmed by trade barriers should strive for a free trade agreement with the EU even though it will be difficult to be reached.

The paper is organised in the following way. In Section 2 a short overview of the EU and MERCOSUR is given. Section 3 contains an empirical study on the reaction of MERCOSUR's exports with respect to changes in real exchange rate and EU's business cycle. The trade barriers imposed by the EU are described in Section 4. Not only will mention be made of the type of the trade barriers and the sectors affected, but also of the importance of these sectors in the respective MERCOSUR countries. Finally, Section 5 presents an outlook and the conclusions.

[3] Technical trade barriers probably affect more the access itself and quality aspects of the product.

## 2. Development and perspectives of the MERCOSUR-EU trade agreement

A very recent example of North-South integration is the EU-MERCOSUR trade agreement. The first negotiations leading to this agreement started in 1995, with the signing of an Interregional Framework Agreement aimed at fostering economic co-operation and closer trade relations between the two regional blocs. A further objective was the creation of a Free Trade Agreement (FTA) in 2005. Until June 2001, the exchanges developed in the agreement framework consisted in gathering information and laying the grounds for future negotiations. Concrete negotiations only began in 2001, when questions related to tariffs and services started to be discussed. Tough negotiations are to be expected for agricultural products (sugar, cereals, milk, and meat), for textiles and for leather products, as well as for industrial products (steel, ferroalloys, aluminium and other metals, fertilisers, chemicals, potash, plastics, PVC and synthetic rubber).

On the side of the EU, incentives to engage in substantive negotiations with MERCOSUR will depend closely on the consolidation and progress of the MERCOSUR as a Customs Union. On the side of MERCOSUR, market access, trade expansion, international bargaining and credibility considerations are incentives playing a major role to engage in FTA negotiations with the EU.

MERCOSUR has surely a shorter history than the EU. Argentina, Brazil, Paraguay and Uruguay signed the MERCOSUR agreement in 1991 and it went into effect in 1995 becoming a Customs Union. Following the entry into force of the Common External Tariff on January 1, 1995, the MERCOSUR countries must maintain a common commercial policy. Bolivia and Chile are associated countries of the MERCOSUR without full membership status. Bolivia and Chile signed the association agreements with MERCOSUR in 1995 and 1996 respectively. MERCOSUR has also been trying to promote Chile's[4] full membership and inclusion into the MERCOSUR-customs union in 2000. A point of concern for Chile was the fact that Chile's import tariffs were much lower than MERCOSUR's average external tariff. Chile's average

[4] However, the MERCOSUR countries took offence at Chile's sudden disinterest in full membership at the end of 2000 and at her bilateral negotiations with the U.S.A. about a FTA. Cardoso, Brazil's president and MERCOSUR's chairman at that time, finally suspended further talks with Chile in December 2000.

import tariff is 9 per cent (to be lowered to 6 per cent in 2003) and MERCOSUR's common external tariff is 13% (Lateinamerika Jahrbuch 2001, 2001).

There is a shared consensus that since its inception MERCOSUR outperformed expectations. This shows up in part by the rapidly growing trade and investment flows. In fact, between 1991 and 1997 intra-MERCOSUR exports rose at a rate that trebled the growth of exports to the rest of the world. Nevertheless, if imports are taken as the indicator, the gap between the growth rates of intra and extra-regional trade flows is remarkably lower. This indicates no evidence of significant trade diversion.

MERCOSUR is considered as an emerging market offering good investment opportunities, with a population over two hundred million inhabitants (it represents half of the population of Latin America and Caribbean). MERCOSUR has probably more to gain by joining the EU in a FTA rather than negotiating with North America, since MERCOSUR member countries already have relatively free access to the North American market. A FTA with the EU, in contrast, will improve access to that market and reduce its dependency on the U.S.A. (Panagariya, 1996).

However, the main question is whether the EU will be willing to make major concessions in agricultural trade. Since agriculture and fishery make up about 2/5 of MERCOSUR's total exports into the EU, this issue is of utmost importance for the MERCOSUR countries (Nunnenkamp, 2001).

There have been several attempts to measure the effects on trade flows since the formation of MERCOSUR (Yeats (1998), Diao and Somwaru (2000)), most of them refer to aggregated trade flows and predict small net welfare gains for the country members.

The authors' analysis will proceed in two analytical steps. First, in Section 3 the influence of macroeconomic changes (exchange rates, inflation rates...) is to be filtered out. Second, Section 4 has the objective to evaluate the EU's possible negative contribution to MERCOSUR's export development.

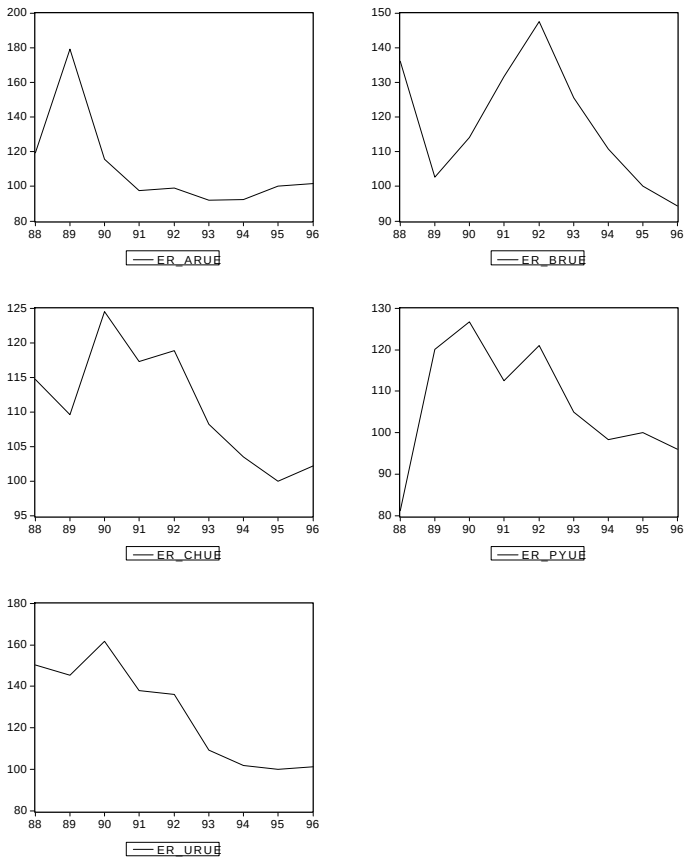
## 3. MERCOSUR's exports and the macroeconomic environment

Before turning to externally imposed trade barriers and their impact on MERCOSUR's exports, the importance of the macroeconomic environment for MERCOSUR's exports must be investigated. MERCOSUR'S exports demanded by

the EU are analysed on a sectoral level. Emphasis is laid on the role played by relative prices (i.e. the influence of the exchange rate policy and the development of price levels in the MERCOSUR countries and the EU) and the business cycle in the EU.

According to Figure 1 the MERCOSUR countries, with the exception of Brazil; experienced quite strong appreciations[5] of their real exchange rates (er_areu, er_cheu, er_pyeu, er_ureu) in relation to the EU. The trend toward appreciation began in 1989 as far as Argentina is concerned and in 1990 as far as Chile, Paraguay and Uruguay are concerned.

**Figure 1: Real exchange rate development vis-à-vis the EU**




The objective of the country-regressions across sectors and across time is to investigate two relevant issues. First**,** whether this real appreciation harmed the exports of specific countries and sectors or whether a different exchange rate policy

[5] The authors use the price notation of the exchange rate. A fall of the exchange rate stands for an appreciation.

would have helped to promote MERCOSUR's exports. Second, how dependent MERCOSUR's exports were from EU's business cycle.
In a separate study the potential impact of cuts in tariffs and subsidies accorded in the Uruguay Round[6] will be analysed. In the present investigation changes in trade policy are treated as constant since in the period under study there were no remarkable changes in that respect.

The model to evaluate the macroeconomic impact, i. e. the impact of the real exchange rate and the business cycle of the importing countries (EU) on export demand is based on Goldstein and Khan (1978) and Nowak-Lehmann D. (1997). It assumes imperfect substitution between domestic and foreign products. The model is made dynamic by building in reaction lags, which are shaped as a geometric lag/Koyck lag.
The model under investigation is of the following form:
Argentina:
(1) $lxar_{jt} = c1 + c2*lerar_{it} + c3*lymeu_{t} + c4*lxar_{jt-1}$
Brazil:
(2) $lxbr_{jt} = c1 + c2*lerbr_{it} + c3*lymeu_{t} + c4*lxbr_{jt-1}$
Chile:
(3) $lxch_{jt} = c1 + c2*lerch_{it} + c3*lymeu_{t} + c4*lxch_{jt-1}$
Paraguay:
(4) $lxpy_{jt} = c1 + c2*lerpy_{it} + c3*lymeu_{t} + c4*lxpy_{jt-1}$
Uruguay:
(5) $lxur_{jt} = c1 + c2*lerur_{it} + c3*lymeu_{t} + c4*lxur_{jt-1}$
with:
j = export sectors (j = 00,....., 97)[7]
t = time (annual data; t = 1988, ...., 1996)
lx = exports in logs (in real terms)[8]
lymeu = real income of the EU (trade weighted)[9]

[6] Stepwise cuts in tariffs and subsidies were decided from 1995 on. Transition phases of 6 years/10 years were granted for DCs' agricultural/textiles and clothing exports. However, there were no legal obligations to enforce this agreement.
[7] A maximum of 67 sectors appeared as export sectors.
[8] The figures had to be approximated due to the unavailability of sectoral export deflators.
[9] To keep the analysis simple this variable was assumed to be the same for each MERCOSUR country.

ler = real exchange rate in logs; it is assumed that tariffs and subsidies have not changed in the period of 1988 to 1996 ( see WTO TRADE POLICY REVIEW of the EU, 1995):

In order to keep the model as simple as possible and to avoid the loss of degrees of freedom, a standard pooled estimation is applied. No weighting is performed, a common intercept is utilised and a common coefficient of the adjustment lag is considered adequate. To derive the average[10] real exchange rate elasticity, a common coefficient of 'leer_' is estimated. In analogy, the average business cycle elasticity is derived by including a common coefficient on 'lymeu'.

Table 1, which summarises the results of the pooled analysis regressions for each country, reveals that the assumption of adjustment lags was important for four countries (with the exception of Paraguay). The adjustment coefficients carried the expected right sign and were significant at $\alpha = 1\%$ for Argentina, Brazil, Uruguay and significant at $\alpha = 5\%$ for Chile. The model has a good explanatory power for all countries under study. $R^2$ adjusted was between 81.1 and 94.1. The number of sectors investigated varies in each country, since some countries, especially the smaller countries, do not export in all categories.

Table 1 shows also that four countries (with exception of Brazil) dispose of a significant positive real exchange rate elasticity (taking the average of 56 to 68 sectors). The majority of sectors in Argentina, Paraguay and Uruguay and about half of the sectors in Chile show a significant positive reaction with respect to changes in the real exchange rate. This means that in these countries appreciations of the real exchange rate hurt the export sectors and depreciations of the real exchange rate could improve the export performance. Therefore, one can conclude that exchange rate policy in these countries could contribute to a better export performance.

[10] i.e. across sectors.

**Table 1: Real exchange rate and business cycle elasticities in the MERCOSUR[f]**

| Country | Number of sectors | Average real exchange rate elasticity | Average business cycle elasticity | Adjustment coefficient | Sectoral significance of real exchange rate | Sectoral significance of EU's business cycle | Adj. $R^2$ |
|---|---|---|---|---|---|---|---|
| **Argentina** | **67** | **0.48*** (significant)** | **2.66** (significant)** | **Significant** | **47 out of 67 sectors are real exchange rate elastic** | **All 67 sectors are business cycle elastic** | **91.8** |
| **Brazil** | **68** | **-0.04 (insignificant)** | **0.14 (insignif.)** | **Significant** | **14 out of 68 sectors are real exchange rate elastic** | **None of the sectors is business cycle elastic** | **94.1** |
| **Chile** | **65** | **1.51** (significant)** | **5.76*** (significant)** | **Significant** | **29 out of 65 sectors are real exchange rate elastic** | **All 65 sectors are business cycle elastic** | **89.0** |
| **Paraguay** | **56** | **3.32*** (significant)** | **3.81 (insignif.)** | **Insignif.** | **55 out of 56 sectors are real exchange rate elastic** | **None of the 56 sectors is business cycle elastic** | **85.3** |
| **Uruguay** | **61** | **1.37** (significant)** | **5.26* (significant)** | **Significant** | **42 out of 61 sectors are real exchange rate elastic** | **All 61 sectors are business cycle elastic** | **81.2** |

As far as reactions of the business cycle are concerned, only three out of five countries seem to be dependent on the economic business cycle in the EU. This might be due to the high proportion of agricultural products in MERCOSUR exports. Agricultural or agriculture-based exports are known to be income inelastic.

To sum up, the performance of MERCOSUR exports could be improved by means of an exchange rate policy that manages the real exchange rate and maintains it at a competitive level. However, it has to be acknowledged that this policy is not considered acceptable in the MERCOSUR countries themselves. A shift towards an increased processing of agricultural goods and towards the production of

[f] *** = confidence level of 99%; ** = confidence level of 95%; * = confidence level of 90%

manufactured goods[11] could strengthen the overall income-elasticity of MERCOSUR exports and allow profiting from growth in the industrial countries.

This leads to the issue of whether other factors, i.e. external conditions, such as EU's trade policy, impede MERCOSUR exports to grow and whether improvement of market access to the EU countries should be given a top priority in MERCOSUR-EU trade negotiations.

# 4. Extent and importance of trade barriers imposed on MERCOSUR exports

This section summarizes the trade barriers imposed by the EU on MERCOSUR exports. The description proceeds from a very general to a more specific perspective. According to an UNCTAD study by Supper (2001), developing countries continue to face high trade barriers for their most important export products on their major export markets. Although tariffs are now low or nil for many products, most of those countries can hardly aspire to export in the foreseeable future.

As tariffs tend to decrease, protection tends to shift from tariffs to anti-dumping and countervailing action, safeguards and informal market arrangements. Budget subsidies still play a prominent role, being three times higher in agriculture than in industry. Recent WTO Agreements try to cut back those governmental subsidies, but leave ample room for many other subsidies mainly applied by developed countries.

## 4.1 Overview over EU trade barriers

First, the measures applied by the EU[12] will be described in general terms**.** With respect to protection in agricultural trade by the European Union (EU) the main measures imposed are of the subsidy type and can be extracted from Table 2. With respect to the protection of industrial products the European Union also relies on support measures which are specified in Table 3.

[11] Martínez-Zarzoso and Nowak-Lehmann D. (2002) report some progress on this process. Linder products increased their importance to the detriment of Hechscher-Ohlin products in the period of 1988 to 1996.

[12] One has to bare in mind that other industrialized countries like the United States, Canada, Japan use the same or similar measures. As far as developing countries are concerned they do not concede free market access either, but they do not dispose of comparable budgets in order to finance production, investment and export subsidies.

**Table 2: EU trade barriers in agriculture**

| General measures | Detailed measures |
|---|---|
| Export subsidies | Export refunds |
| Export assistance | Quality promotion measures |
| Food aid | |
| Price, income and marketing support | Price and export subsidies, input support, compensation for exchange rate changes, surplus disposal programs, direct income support |
| Sanitary and phytosanitary support | Veterinary and plant protection programs, support against epizooties |
| Structural improvements and new investments | Investment aids for farm modernization projects, adjustment aids to reform agricultural and fishery structures, compensatory payments per livestock unit, subsidies for processing and marketing, diversification, environment and infrastructure improvements, retention of farmers and research &technology development in agriculture and fishery |
| Environment protection | Agri-environmental measures, afforestation programs |

**Table 3: EU trade barriers in industrial goods trade**

| General measures | Detailed measures |
|---|---|
| Production support measures | Rationalization, modernization of existing industries, reconversion, rescue & restructuring, aid to SMEs for adjustment and modernization, marketing aids, industrial competitiveness policy, standarization, testing, employment support and incentives for job creating investments |
| Investment support | Investment financing, subsidies and tax concessions, promotion of international joint ventures, regional investment aids to new industries, investment aids to SMEs (new projects, expansion), research and development (Community Research and Development Framework Program |
| Export subsidies, export finance and export promotion | Export credits, guarantees, export credit insurance, tax allowances to export activities |
| Environmental and energy measures | Nature protection programs, marine sciences and technology program, grants for energy saving |

The EU provides export subsidies and support on a large scale to its agricultural and livestock producers, as well as its food industry. Export refunds amounted to US$ 5.5 billion in 1997. The main beneficiary is the livestock and dairy sector with 80 per cent of the total. Considerable export subsidies are also granted to cereals (US$ 620 million) and food industry products (US$ 650 million; see Supper, 2001).

Even though the WTO Agreement on Subsidies and Countervailing Measures in principle prohibits industrial export subsidies, which are contingent on export performance, similar programmes intended to promote exports continue to play a significant role in developed countries. According to OECD estimates, its member States spend US$ 7.3 billion on such programmes (Supper, 2001).

### 4.2 EU most protected sectors

Not all sectors are affected by EU protection in the same way. In general protection against agricultural products is much more pronounced than protection against manufactured goods. Table 4 contains the sectors or products which face very high or high non-tariff protection (column 3) and considerable tariff protection (column 4) from the side of EU.[13]

The determination of degree of protection is fact-based, but must contain subjective elements. This is so because protection is not only achieved by the imposition of import tariffs[14], but to a very large extent achieved by non-tariff measures NTBs[15]. Due to the existence and sometimes dominance of a multitude of non-tariff barriers, a weighting scheme based on UNCTAD-information on NTBs (Supper, 2001) had to be created. The information on tariffs comes from two sources. One is the UNCTAD report written by Supper (2001) and other is WTO's Trade Policy Review of the EU of 1995, 1997 and 2000.

[13] The sectors not mentioned show only low or no protection.
[14] Import tariffs could be ranked easily**.**
[15] NTBs cannot be quantified in a satisfying way because of a lack of information on their US-$ or Euro amount concerning total trade and even sparser information on NTBs affecting MERCOSUR trade.

## Table 4: EU most protected sectors

| Cl | Sectors affected by protection | Degree of non-tariff protection | Degree of tariff protection (t=tariff)[f] |
|---|---|---|---|
| 00 | Live animals chiefly for food | Very high | t=18% |
| 01 | Meat and meat preparations | Very high | t=51% |
| 02 | Dairy products | Very high | t=52% |
| 03 | Fish, crustaceans, molluscs, preparations thereof | High | t=12% |
| 04 | Cereals and cereal preparations | Very high | t=62% |
| 05 | Vegetables and fruit | Very high | Price dependent seasonal tariffs On average t=12% |
| 06 | Sugar, sugar preparations and honey | Very high | t=31% |
| 07 | Coffee, tea, cocoa, spices | High | t=7% |
| 08 | Feeding stuff for animals | High | t=37% |
| 09 | Miscellaneous edible products and preparations | Very high | t=25% |
| 11 | Beverages, fruit juices | High | Price dependent tariffs; Average t=25% |
| 12 | Tobacco and tobacco manufactures | Low | t=46% |
| 22 | Oil seeds and oleaginous fruit | High | t=3% |
| 25 | Pulp and waste paper | High | |
| 26 | Textile fibres and their waste | Very high | t=12% |
| 32 | Coal, coke and briquettes | High | |
| 42 | Vegetable oils and fats | High | t=25% |
| 51 | Organic chemicals | High | |
| 56 | Fertilisers, manufactured | High | |
| 59 | Chemical materials and products | High | |
| 61 | Leather, leather manufactures | High | |
| 63 | Cork and wood manufactures (excluding furniture) | High | |
| 65 | Textile yarn, fabrics, made-up articles, related products | Very high | t=11% |
| 67 | Iron and steel | High | |
| 68 | Non-ferrous metals | High | |
| 69 | Manufactures of metal | High | |

[f] An empty cell does not necessarily imply that tariffs are zero. A blank stands for very low tariffs. According to WTO's Trade Policy Review of the EU (2000) EU's average tariff for non-agricultural goods stood at 4.2% in 1999.

| | | | |
|---|---|---|---|
| 75 | Office machines&automatic data... | High | |
| 76 | Telecommunications&sound | High | |
| 78 | Road vehicles | High | |
| 83 | Travel goods, handbags | High | |
| 84 | Articles of apparel, clothing acc. | High | |
| 85 | Footwear | High | |

### 4.3 MERCOSUR's most important export sectors and EU trade protectionism

After having identified the sectors most affected by EU protectionism in Section 4.2, it must be clarified whether these sectors are of relevance in MERCOSUR's export trade and for MERCOSUR's economic development. Important export sectors are the ones that are large (they dispose of a high export share) and/or the ones that are characterised by high annual growth rates. Export shares and growth rates in tables, 5, 6 and 7 follow own calculations. In order to avoid swings that distort the picture, averages are computed for the period of 1988/89 to 1996. The following two tables contain an overview over the eight most dynamic or fastest growing sectors (Table 5) and the eight biggest export sectors (Table 6) in the MERCOSUR countries[16].
However, caution when interpreting the figures must be taken: A sector with a high export share can be considered as a sector with relative national importance and with relative competitive strength. This strength might be the result of a favourable resource endowment and might therefore be an indicator of comparative advantage (in the absence of policy). However, strength might well follow from the rational build-up of competitive strength by means of a whole set of policies (devaluation policy, industrial and technology policy, regional policy etc.). Interpretations of dynamic growth must be carefully done for similar reasons. Sector-specific industrial and technological policies might be the cause of above-average growth. But, a very low starting level might be another cause of above-average growth rates.

[16] Argentina, Brazil, Chile, Paraguay and Uruguay.

**Table 5: MERCOSUR's fastest growing exporting sectors and their contribution to total exports (1988/9-96)**

| Cl. | Product category | Average annual growth (1989-96) | Export share (1988-96) | EU protection |
|---|---|---|---|---|
| 32 | Coal, coke and briquettes | 97.06% | 0.01% | high |
| 81 | Sanitary, plumbing,... | 61.94% | 0.01% | low |
| 33 | Petroleum, petroleum products | 60.44% | 0.46% | low |
| 23 | Crude rubber | 53.47% | 0.07% | low |
| 73 | Metal working machinery | 44.38% | 0.13% | low |
| 82 | Furniture and parts thereof | 40.07% | 0.47% | low |
| 57 | Explosives and pyrotechnic prod. | 38.16% | 0.00% | low |
| 11 | Beverages | 35.94% | 0.28% | high |

Table 5 shows that the most dynamic sectors have very low export shares, all of them lying between 0 and 1 per cent. It also indicates that low protection from the side of the EU helps fast growing exports. The fastest growing sectors are in general of non-agricultural origin. This finding is supported by a study that revealed the increasing importance of Linder products[17] in relation to Heckscher-Ohlin products[18] in MERCOSUR exports to the EU in the period of 1988 to 1996 (Martínez-Zarzoso and Nowak-Lehmann D. , 2002).

Now, attention is devoted to MERCOSUR sectors with the highest export shares (Table 6). The majority of the large sectors is to be found in the categories 'agriculture, forestry, fishery', 'textiles' and 'metals' that are subject to high or even very high protection from the side of the EU. They belong to the category of Heckscher-Ohlin products whose trade is explained by differentials in the resource endowment (labour, capital, human capital, natural resources). Traditional trade theory would assume a comparative advantage for the products in Table 6. Strategic trade policy or exchange rate management, in contrast, do not seem to be the causal factors of the observed export strength.

[17] Trade of Linder products is favoured by similar levels of development (income levels) of trading partners.

[18] Trade of H-O products is determined by different factor endowments of trading partners.

However, it is quite difficult to evaluate the growth performance of these sectors. From Table 7 it becomes clear that the average annual growth rates in the categories: 'very high', 'high' and 'low' EU-protection are significantly different. The average growth rate of the low protection sectors amounts to 17.09 per cent, whereas the growth rates of high and very high protection sectors stand at 7.10 and 2.65 per cent respectively. It has to be borne in mind that these figures are not weighted by export shares, but they still shed light on the broad picture.

**Table 6: MERCOSUR's biggest sectors and their dynamics (1988/9-1996)**

| Cl. | Product category | Export share (1988-96) | Growth dynamics (1989-96) | EU protection |
|---|---|---|---|---|
| 08 | feeding stuff for animals | 14.40% | 1.17% | high |
| 05 | vegetables and fruit | 8.98% | 4.47% | very high |
| 28 | metalliferrous ores ... | 8.96% | 9.67% | low |
| 68 | non-ferrous metals | 8.08% | 1.13% | high |
| 22 | oil seeds and oleaginous fruit | 7.63% | -0.87% | high |
| 02 | dairy products | 5.99% | 0.94% | very high |
| 61 | leather, leather manufactures | 2.71% | 8.34% | high |
| 03 | fish, crustaceans, molluscs | 2.56% | 4.79 | high |

**Table 7: MERCOSUR's export growth rates in different categories of protection**

| 'Very high protection' sectors (9 sectors) | | growth rate: 2.65 (unweighted) |
|---|---|---|
| 00 | Live animals chiefly for food | -0.85 |
| 01 | Meat and meat preparations | 2.63 |
| 02 | Dairy products and birds' eggs | 0.94 |
| 04 | Cereals and cereal preparations | 2.06 |
| 05 | Vegetables and fruit | 4.47 |
| 06 | Sugar, sugar preparations and honey | 1.27 |
| 09 | Miscellaneous edible products | 19.31 |
| 26 | Textile fibres and their wastes | -0.58 |
| 65 | Textile yarn, fabrics, made-up articles | -5.37 |
| 'High protection' sectors (23 sectors) | | growth rate: 7.10 (unweighted) |
| 03 | Fish, crustaceans, molluscs, preparations thereof | 4.79 |

| | | |
|---|---|---|
| 07 | Coffee, tea, cocoa, spices | -3.19 |
| 08 | Feeding stuff for animals | 1.17 |
| 11 | Beverages | 35.94 |
| 22 | Oil seeds and oleaginous fruit | -0.87 |
| 25 | Pulp and waste paper | 13.38 |
| 32 | Coal, coke and briquettes | 97.06 |
| 42 | Fixed vegetable oils and fats | -1.80 |
| 51 | Organic chemicals | 1.72 |
| 56 | Fertilisers, manufactured | 18.66 |
| 59 | Chemical materials and products | -5.50 |
| 61 | Leather, leather manufactures | 8.34 |
| 63 | Cork and wood manufactures (excluding furniture) | 9.71 |
| 64 | Paper, paperboard, articles of paper | 0.06 |
| 67 | Iron and steel | 3.16 |
| 68 | Non-ferrous metals | 1.13 |
| 69 | Manufactures of metal | 10.21 |
| 75 | Office machines&automatic data processing | -3.21 |
| 76 | Telecommunications&sound recording apparatus | -16.95 |
| 78 | Road vehicles | -0.42 |
| 83 | Travel goods, handbags and similar containers | -2.88 |
| 84 | Articles of apparel and clothing accessories | -3.24 |
| 85 | Footwear | -3.91 |
| 'Low protection' sectors (34 sectors) | | growth rate:<br>17.09 (unweighted) |
| 12 | Tobacco and tobacco manufactures | 4.34 |
| 21 | Hides, skins and furskins | 14.23 |
| 23 | Crude rubber | 53.47 |
| 24 | Cork and wood | 6.07 |
| 27 | Crude fertilisers and crude materials | 7.02 |
| 28 | Metalliferrous ores and metal scrap | 9.67 |
| 29 | Crude animal and vegetable materials | 6.02 |
| 33 | Petroleum, petroleum products | 60.44 |
| 41 | Animal oils and fats | 10.78 |
| 43 | Animal-vegetable oils-fats, processed... | 9.76 |
| 52 | Inorganic chemicals | 10.93 |
| 53 | Dyeing, tanning and colouring materials | 10.70 |
| 54 | Medicinal and pharmaceutical products | 6.98 |
| 55 | Essential oils&perfume materials | 5.98 |
| 57 | Explosives and pyrotechnic products | 38.16 |
| 58 | Artificial resins, plastic materials | 14.14 |
| 62 | Rubber manufactures | 9.10 |

| | | |
|---|---|---|
| 66 | Non-metallic mineral manufactures | 7.87 |
| 71 | Power generating machinery and equipment | 12.39 |
| 72 | Machinery specialised for particular industries | 7.04 |
| 73 | Metalworking machinery | 44.38 |
| 74 | General industrial machinery&equipment | 17.68 |
| 77 | Electrical machinery, apparatus&appliances | 8.81 |
| 79 | Other transport equipment | 27.16 |
| 81 | Sanitary, plumbing, heating+lighting fixtures | 61.94 |
| 82 | Furniture and parts thereof | 40.07 |
| 87 | Professional, scientific&controlling instruments | 14.09 |
| 88 | Photographic apparatus, optical goods, ... | 13.50 |
| 89 | Miscellaneous manufactured articles | 2.23 |
| 91 | Postal packages not classified accord. to kind | 7.14 |
| 93 | Special transactions not classified accord. to .. | 1.19 |
| 94 | Animals, live, zoo animals, dogs, cats | 2.97 |
| 95 | Arms of war and ammunition therefore | 15.37 |
| 97 | Non-monetary gold | 19.43 |

## 5. Outlook and conclusions

The ex-post analysis for the period of 1988 to 1996 revealed three things: First, a more competitive real exchange rate could improve MERCOSUR's export performance. Second, EU protection has had in general a very negative impact on MERCOSUR export growth rates. The most dynamic sectors were on average characterised by low EU-protection. 'Low protection sectors' grew much faster than 'high protection sectors', and 'very high protection sectors' grew the most slowly. Third, EU protection strongly affected MERCOSUR sectors with the highest export shares. These were basically the sectors with a comparative advantage where a favourable resource endowment can be observed. These sectors are not only crucial for GDP growth, but are also the main suppliers of foreign exchange.

From today's point of view the question is whether EU protection has changed significantly since 1996 due to the Uruguay Round agreements and in which areas some progress has become visible. The answer might be found in several articles of Finger (2001a,b,c,d), Finger and Nogués (2001), Adhikari (2002) who take a close look at the Uruguay Round outcome and in the latest WTO Trade Policy Review of the EU (2000). The Uruguay Round commitment contained five important points:

1) All non-tariff measures (NTM) should be eliminated and replaced by tariffs (i.e. tariffication).

2) Tariffs should be reduced: industrial countries should reduce import tariffs by an average of 36 percent over six years, developing countries should reduce their tariffs by 24 percent over ten years.

3) Export subsidies and domestic support should be reduced in a parallel way by the same percentages.

4) All textiles and clothing products should be integrated into GATT in four stages (first day of calendar years 1995, 1998, 2002 and 2005), encompassing 16 percent, 17 percent, 18 percent and 49 percent (by 1990 volume) of all specified textiles and clothing products.

5) New domestic regulations in areas such as services and intellectual property should be adopted in the LDCs.

As Finger and Nogués (2001) point out the 1st point of these negotiation outcomes was written into the agreement as a legal obligation, but the 2nd and 3rd points were not, thus creating a considerable amount of slippage. This view is confirmed by WTO's Trade Policy Review on the EU of 2000, which admits that the EU was implementing the Uruguay Round commitments on schedule[19], although the extent of actual trade liberalisation must be judged as modest. Today's external trade regime of the EU continues to contain many trade impediments and has the following features:

- The EU has a largely open market for non-agricultural products, with an average Most Favoured Nation (MFN) tariff of 4.2% in 1999. In addition, the EU removed six quantitative restrictions under the WTO Agreement on Safeguards, notably Germany's restriction on coal (in place since 1958). Anti-dumping measures are in place on imports of iron and steel products, electronic products, and chemical products from a number of origins. State aid undermines conditions of competition in parts of the manufacturing sector.
- Conditions of access on agricultural products are affected in the EU by the operation of the Common Agricultural Policy (CAP). High levels of self-sufficiency apply to primary agricultural products, such as wheat, dairy products, and meat. The simple average tariff on agricultural products is estimated at 17.3%, although access

[19] The implementation period runs from July 1995 to July 2000.

on high-tariff items mainly takes place through tariff quotas. The duty system is rather complex. Duties are assessed on specific terms, on the basis of ingredients or the season (e.g. vegetables and fruit), or based on the entry price. As a result, more open conditions of access generally apply to items not produced in the EU (e.g. coffee, cocoa).

- In addition to border measures, the Community spent Euro 45 billion (US$ 50 billion) on the CAP in 1999, making agriculture - at 45% of the budget - the most visible item of Community expenditure. Direct payments (which are subject to production-limiting programs) have risen in importance to account for about one-quarter of the total.
- Market access conditions, via product regulations and standards, for exporters of foodstuffs are likely to be affected by the EU's policy of greater food safety in the future.
- Textiles and clothing is a category of imports subject to above-average tariffs, tariff escalation[20], and quotas. The EU maintains quotas under the WTO Agreement on Textiles and Clothing (ATC), which were carried over from the long-standing Multi-Fibre Arrangement. Growth rates were increased by 16% on 1 January 1995 and by 25% on 1 January 1998; higher growth rates have applied to small suppliers. The careful wording of the agreement has allowed the industrial countries to put off much of market liberalisation until the very end of the transition period, until 2005. Through the first two stages the EU has only eliminated seven percent of its restrictions (Finger and Nogués, 2001).
- In the services sector the EU is committed to continue removing restrictions to competition and trade. However, among subsectors, the pace of liberalisation differs significantly.

Against these quite meagre Uruguay Round achievements, trade ministers from around the world gathered in Doha on the Persian Gulf for a WTO meeting in November 2001. The objective was to agree, for both DCs and LDCs, an acceptable agenda for international trade talks. Whereas the Quad countries (the EU, US, Canada, Japan) wanted new issues to be discussed (investment, competition, transparency in government procurement, trade facilitation, further reductions in industrial goods), LDCs asked for existing agreements (e.g. Uruguay Round Agree-

[20] The tariff increases with the degree of processing.

ments) with their promises for agricultural goods and textiles and clothing to be thoroughly reviewed, before any discussions are opened on any further issues. There are provisions for reviews in many of the existing agreements but so far none have been carried out (Christian Aid, 2001).

To conclude, the following proposals can be made against the background of actual outcomes of the Uruguay Round and some findings in Section 3:

- Some kind of exchange rate management seems to be advisable for the MERCOSUR countries. A permanent appreciation of the real exchange rate should be avoided. This would help export growth to some extent, depending on the specific exchange rate elasticities.
- The old Uruguay Round agreements from 1994 which contained several improvement for LDCs in general and the MERCOSUR countries specifically, as exporters of agricultural products and textiles/clothing, should be reviewed with rigour and placed on the 'after Doha' agenda again.
- Trade talks between the MERCOSUR and the EU should be pursued, but seen from a realistic perspective. A Free Trade Agreement between the EU and the MERCOSUR that also includes sensitive goods (such as agriculture and textiles/clothing) will be difficult to reach given the experience from the last 9 years. EU concessions will depend on new regulations for services and intellectual property rights from the side of MERCOSUR. These concessions might be very costly[21] for these countries.

[21] See remarks of Finger and Nogués, 2001e.

## References


Adhikari, R. (2002), *Developing countries in the world trading system: the Uruguay Round and beyond*, Cheltenham:Edward Elgar.

Christian Aid (2001), WTO meeting in Doha in 2001; http://www.christian-aid.org.uk/campaign/trade/dohacom.html.

Diao, X. and A. Somwaru (2000), 'An inquiry on general equilibrium effects of MERCOSUR: An itertemporal world model', *Journal of Policy Modelling* 22(5), 557-588.

Finger, M. (2001a), 'Implementing the Uruguay Round agreements: problems for developing countries', *The World Economy* 24(9), 1097-1108.

Finger, M. (2001b), 'Implementation of Uruguay Round commitments: the development challenge', in: *Developing countries and the WTO*, 115-129.

Finger, M. (2001c), 'Market access advances and retreats: the Uruguay Round and beyond', in: *Developing countries and the WTO*, 251-308.

Finger, M. (2001d), 'Market access: unfinished business: post-Uruguay Round inventory and issues', WTO, Economic Research and Analysis Division, Geneva: WTO Publications.

Finger J.M. and J. Nogués (2001e), 'The unbalanced Uruguay Round outcome: The new areas in future WTO negotiations', Washington, DC: World Bank, Development Research Group, Trade, December 2001.

Goldstein, M. and M. Khan (1978), 'The supply and demand for exports: A simultaneous approach. ' *The Review of Economics and Statistics* LX (2), 275-286.

Martínez-Zarzoso I. and F. Nowak-Lehmann D. (2002), 'Explaining MERCOSUR sectoral exports to the EU. The role of economic and geographic distance', Discussion Paper No. 85, Ibero-America Institute for Economic Research; University of Goettingen.

Neufeld, I. (2001), 'Anti-dumping and countervailing procedures- use or abuse? Implications for developing countries , *UNCTAD, Policy Issues in International Trade and Commodities, Study Series No.9.*

Nowak-Lehmann D., F. (1997), 'Reaction Lags of Chilean Manufacturing Exports in a Framework of Dynamic Macroeconometric Modelling', Discussion Paper No. 70, Ibero-America Institute for Economic Research, University of Goettingen, Germany.

Nunnenkamp, P. (2001), 'Ist diesmal alles anders? Die neue Welle regionaler Integration in Lateinamerika aus europäischer Perspektive.' Lateinamerika Jahrbuch 2001. Vervuert Verlag: Frankfurt am Main, 9-29.

Panagariya, A. (1996), 'The free trade area of the Americas: Good for Latin America?', *World Economy* 19, 485-515.

Senhadji, A. and C. Montenegro (1999), Time series analysis of export demand functions: A cross-country analysis', *IMF Staff Papers* 46(3), 259-273.

Senti, Richard (2000), 'What did the Uruguay Round Achieve for Latin America?', In: *The Transformation of Latin America. Economic Development in the Early 1999s* (eds: F. Foders and M. Feldsieper), Edward Elgar, 83-95.

Supper, E. (2001), 'Is there effectively a level playing field for developing countries exports?', *UNCTAD, Policy Issues in International Trade and Commodities, Study Series No.1*.

Valdés, A. (2002), 'WTO negotiations and agricultural trade liberalization', in: *Latin America: its future in the global economy*, Palgrave, 184-200.

Whalley, J. (2000), 'What can the developing countries infer from the Uruguay Round Models for future negotiations?', *UNCTAD, Policy Issues in International Trade and Commodities, Study Series No.4*.

WTO Trade Policy Review, European Union (1995, 1997, 2000), World Trade Organisation, Geneva.

Yeats, A. (1998), 'Does MERCOSUR's trade performance raise concerns about the effects of regional trade arrangements?', *The World Bank Economic Review* 12(1), 1-28.