This paper examines the possible impact of MERCOSUR on Paraguay's economic and educational systems. MERCOSUR is a trade agreement among Argentina, Brazil, Paraguay, and Uruguay, under which terms all import tariffs among the countries will be eliminated by 1994. The countries will enter into a common economic market. The worst-case scenario resulting from the agreement is one of negative growth in the region. If economic growth is limited to Paraguay's neighboring countries, migration of Paraguayans to those countries could occur. In the best-case scenario, Paraguay could benefit from expansion of exported agricultural products and livestock, which could result in progressive industrialization. However, given the lack of industrial development and education, most analysts believe that Paraguay could suffer when MERCOSUR is implemented fully. Therefore, the country will need to make the following fundamental changes in its educational policy to maintain or improve current standards of living under the trade agreement: (1) increase levels of spending on education; (2) shift to a curricular emphasis on the development of productive and managerial skills; and (3) place more emphasis on science and technology. Four tables are included.
PLANNING EDUCATION FOR REGIONAL ECONOMIC INTEGRATION:
THE CASE OF PARAGUAY AND MERCOSUR

Noel McGinn
Harvard University

Paper presented at
Comparative and International Education Society Annual Meeting
Kingston, Jamaica
March 1993
PLANNING EDUCATION FOR REGIONAL ECONOMIC INTEGRATION:  
THE CASE OF PARAGUAY AND MERCOSUR

Noel McGinn  
February 27, 1993

Education systems are developed by political and economic communities in response to goals and conditions within their boundaries. The emergence of a capitalist world economic system, however, has led to the formation of regional political and economic unions that weaken traditional concepts of national identity and sovereignty. Regional economic integration expands the set of factors that national education planners must take into consideration.

This paper argues that the education development strategy that would be most appropriate for Paraguay given participation in a regional common market, is very different than that which would be preferred if Paraguay were to continue its economic independence.

In March 1991 the presidents of Argentina, Brazil, Paraguay and Uruguay committed their four countries to a common economic market. Under the terms of the Agreement, known as MERCOSUR, all import tariffs between the countries will be eliminated by 1994. A common tariff will be imposed on products imported from other countries. The Agreement commits the countries to establish common macroeconomic policies, speaking of

"the need to promote the scientific and technological development of the Member States, and to modernize their economies in order to improve the supply and quality of available goods and services resulting in improved standards of living for their inhabitants."

The Agreement affirms the "political will [of the countries] to establish the basis for an increasingly closer union of their peoples." Free movement of people is not mentioned in the Agreement, but is understood to be part of the package.

Since the signing of the Agreement tariffs on imports from member countries have been reduced by 61% (as of September 1992). Various joint development projects have been initiated, and action has been write common standards for products and services. Commerce between Argentina and Brazil has increased significantly, but the impact on imports and exports of Paraguay and Uruguay has not been appreciable.

Expected Economic Impact on Paraguay

Almost all analysts expect that MERCOSUR will have an immediate negative impact on Paraguay. National critics claim that the Agreement was signed without sufficient consideration of its possible consequences.
"The political decision to participate in MERCOSUR was not based on a prior study of alternatives...In our case the government accepted the positive attitudes of those few executives of very large firms that were consulted...As an hypothesis it is not unreasonable, but there were no studies that demonstrated even a minimal degree of certainty based on the sectoral reality of the economy."\(^2\)

These critics note the lack of industrial infrastructure, and the low quality of the labor force in terms of education level. They also call attention to the lack of managerial skills necessary to survive in a competitive economy.

Paraguay is seen by possible investors as the least attractive of the four countries. Of those interviewed, 67% preferred Brazil, 23% Uruguay, 19% Argentina, and 4% Paraguay.\(^3\) Although labor is cheaper (see Table 1) and labor legislation more favorable to employers in Paraguay (see Table 2), productivity is highest in Argentina and Brazil.

### Table 1

Average Salaries in MERCOSUR Countries 1991\(^4\)

<table>
<thead>
<tr>
<th>Country</th>
<th>Average Salary</th>
<th>Coefficient of Variation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>973.4</td>
<td>36.1</td>
</tr>
<tr>
<td>Brazil</td>
<td>872.8</td>
<td>57.2</td>
</tr>
<tr>
<td>Uruguay</td>
<td>691.1</td>
<td>36.6</td>
</tr>
<tr>
<td>Paraguay</td>
<td>338.0</td>
<td>44.9</td>
</tr>
</tbody>
</table>

### Table 2

Degree of Flexibility Favoring Management of Labor Legislation in MERCOSUR Countries\(^5\)

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Uruguay</th>
<th>Paraguay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firing (job stability, compensation, warning)</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>+</td>
</tr>
<tr>
<td>Contracting</td>
<td>+</td>
<td>0</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Unionization</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>+</td>
</tr>
<tr>
<td>Health and accidents</td>
<td>-</td>
<td>+</td>
<td>0</td>
<td>+</td>
</tr>
<tr>
<td>Strikes</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Work hours</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minorities</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Collective bargaining

Low wages, low productivity, and labor legislation favoring employers all are the heritage of the 30-year dictatorship of Alfredo Stroessner, deposed in 1990. Stroessner's long reign can be attributed in large measure to a small but steadily growing economy that generated wealth for some and low prices for most. The basis of the economy was exportation of basic agricultural products, primarily soy seed for oil, unprocessed cotton fiber, meat and hides, and timber, and importation of manufactured goods at low cost to consumers. Export earnings were high thanks to high world demand for soybean, and high quality of Paraguayan cotton. Import prices were relatively low because of low real tariffs. Many expensive goods (cigarettes, liquor, automobiles, electronics) were smuggled into Paraguay, in a system in which Stroessner and his supporters benefitted directly or through licensing.

Industrial development under these conditions was limited to subsidized parastatal firms (such as a steel plant that uses government-generated electricity for its ovens), some private firms that had special arrangements with the regime, and a few others with highly skilled entrepreneurs who achieved high levels of productivity. Only a small fraction of agricultural product was industrialized, in part because of high returns to primary products, in part because the principal purchasers insisted on maintaining control of processing, in part because of the low skill level of the labor force, and the lack of incentives for industrialization from the government. Between 1975-1980 the economy of Paraguay grew at 8% per year, thanks to Paraguayan participation with Brazil in the construction of a high dam on the Itaipú River. But little of the increased income was invested in productive activities, or in education.

The Stroessner regime spent little on improvement of the productivity of the labor force. In 1990 public sector spending on education was 1.2% of the Gross Domestic Product. The average for Latin America is 3%. Brazil spends 4.5% of its GDP on public education. Paraguayan spending on education declined in real terms between 1983 and 1989 (despite economic growth). Enrollments in primary education increased, but total spending declined 20%. Table 3 compares public spending per pupil as a proportion of GNP with other countries in South America. Paraguay is the lowest. Private spending on education in Paraguay is 35% of total public spending, which reflects unmet demand for provision of education.
Table 3

Spending per Pupil in Primary Education as a Proportion of GNP per Capita, South America

<table>
<thead>
<tr>
<th>Country</th>
<th>Per pupil/GNP/capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>.09</td>
</tr>
<tr>
<td>Brazil</td>
<td>.10</td>
</tr>
<tr>
<td>Chile</td>
<td>.11</td>
</tr>
<tr>
<td>Colombia</td>
<td>.07</td>
</tr>
<tr>
<td>Ecuador</td>
<td>.06</td>
</tr>
<tr>
<td>Paraguay</td>
<td>.03</td>
</tr>
<tr>
<td>Peru</td>
<td>.05</td>
</tr>
<tr>
<td>Uruguay</td>
<td>.08</td>
</tr>
<tr>
<td>Venezuela</td>
<td>.05</td>
</tr>
</tbody>
</table>

As a result of this heritage of low spending on education, the labor force in Paraguay is less well-educated than that of the other countries in MERCOSUR. The average level of education of members of the labor force in Paraguay is 4.3 years, compared to 5.6 years in Brazil, 6.3 in Bolivia, 7.0 in Peru, 8.1 in Chile. A survey of government and business officials in the four countries produced these kinds of comments about the quality of human resources.

Brazil:  "has a broad education system, especially for those industrial specializations that have excellent perspectives at the global level"

"has abundant and low cost manpower".

Argentina: what most favors investment are "the human resources".

Uruguay: is a good investment because of "the cultural level of the population".

Paraguay: "is the least prepared from the point of view of human capital"

has an "insufficient education system for a more or less rapid development"

"lacks management capacity".
Static Analysis of Possible Outcomes

Given the lack of industrial development and education, most analysts believe Paraguay could suffer when MERCOSUR is implemented fully. If no changes are made in current conditions and policies, industrial production will decline, consumer prices will increase, and domestic commerce will decline. First, the total elimination of tariffs on imports will remove what little protection current industry has enjoyed. In the worst case scenario most industry, including agro-industry, owned by Paraguayans will disappear. Several Paraguayan capitalists told me, "With the formation of a common market, production has to be centralized and distribution decentralized". A survey of the 500 largest firms in Brazil indicated that only 2.9% plan to open new plants in the other MERCOSUR countries. In Argentina only 0.6% of the large firms expect to open new plants. Location in Paraguay would make little sense, given the small national market, and the cost of transport to markets in Argentina and Brazil.

Prices for manufactured goods in Paraguay will increase. The elimination of tariffs between member countries will produce little benefit for consumers as they are used to buying smuggled goods. The imposition of a common external tariff for goods from outside the region on the other hand will mean that Paraguayan consumers will now have to pay some tariffs.

Paraguayan commerce had benefitted from a steady flow of consumers from Argentina and Brazil who came to buy smuggled goods at low prices. This "consumer tourism" will end once internal tariffs are eliminated and the common external tariff is applied.

Worst Case Scenario--Negative Economic Growth in the Region

Government revenues will decline even further than they would if MERCOSUR did not exist. The imposition of a common external tariff will increase costs to consumers, reduce spending, and thereby reduce the value added (sales) tax which is a major source of revenue for the government. Low or negative rates of growth (and high rates of unemployment) in all countries could lead to an increase in migration into Paraguay of Argentines, Brazilians and Uruguayans who, because of higher skill and education levels, would displace Paraguayan skilled workers, technicians and professionals.

Economic Growth only in the Neighboring Countries

What could happen if MERCOSUR stimulates the economies of Argentina and Brazil (and perhaps even Uruguay), but not that of Paraguay? One effect could be an increase in migration of Paraguayans to these countries. Paraguay has supplied low cost
labor especially to Argentina during period of high growth in that country. These have included women as domestic workers in urban areas, and men as agricultural laborers. Some (unmeasured) part of the earnings of these workers are returned as remittances to relatives in Paraguay, but the evidence is that this income is used to purchase basic consumption goods, rather than invested in other economic activities. In the past, most migrants have been either landless peasants, or persons with some education who have abandoned subsistence agriculture.

Economic Growth in Paraguay through Expansion of Agriculture

In the best case scenario, Paraguay could benefit from MERCOSUR by expansion of the exportation of agricultural products and livestock to the member countries. Heading the list of products are soy seed and cotton fiber, as a common external tariff would favor Paraguayan producers over those in other (non-MERCOSUR countries). Other possibilities are fruits, vegetables and flowers. Paraguay has excellent soil and climactic conditions for this kind of agriculture, and if the other countries industrialize even more than they have, then Paraguay could be a major supplier of foodstuffs.

In the best case scenario, Paraguay could over time shift from export of primary products to export of processed foodstuffs. This progressive industrialization would over time provide the basis (generation of capital and improvement of the skills of the labor force) for industrialization in other sectors. This so-called "Swiss" strategy should be distinguished from one which calls for increased agricultural productivity through mechanization of production (e.g., mechanical planters, harvesters, etc.). Mechanization would displace many small subsistence farmers, and expand the unemployed population likely to migrate out of Paraguay. Industrialization through food processing would generate employment in rural areas and increase income of farm laborers as well as small owners. In the very long time, Paraguay could compete with the larger countries in the region in the production of basic goods that require a relatively low-skilled labor force, just as Brazil has competed successfully with the United States.

Implications for the Education System

Given the above argument, Paraguay will have to make fundamental changes in education policy in order to maintain or improve current standards of living under MERCOSUR.

First, the government will have to increase levels of spending on education significantly. There have been calls for privatization in Paraguay, but this policy is not recommended. Unsatisfied demand for education has persisted for quite a while, which suggests that many households are unable to afford non-subsidized private education. Private schools are located
primarily in urban areas; subsidization would increase urban enrollments at the expense of rural enrollments. But the economic future of Paraguay appears to rest on the education levels of its rural population. Finally, limited evidence indicates that private education in Paraguay is not more cost-effective than public education, and should therefore not be subsidized. One possible source of finance for public education could be the income generated by the common external tariff that will be levied under MERCOSUR. The European Community uses income from its external tariff to finance its Social Fund, which is distributed to member countries on the basis of need.

Current policies of increased spending to increase access to secondary education should be reversed. More attention should be given to primary, for improvement of quality. The current economy provides relatively fewer employment opportunities for secondary school leavers and graduates, as shown in Table 4. All the scenarios reviewed earlier suggest that MERCOSUR will reduce demand for Paraguayan secondary school graduates even more.

Table 4

Unemployment Rate by Level of Instruction, Asuncion, 1990

<table>
<thead>
<tr>
<th>LEVEL OF INSTRUCTION IN YEARS</th>
<th>Primary</th>
<th>Secondary</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Unemployed</td>
<td>0-3</td>
<td>4-6</td>
<td>7-9 10-12</td>
</tr>
<tr>
<td></td>
<td>3.1</td>
<td>5.4</td>
<td>9.1 8.4</td>
</tr>
</tbody>
</table>

The curricular emphasis of basic and secondary education should be shifted to give more attention to development of productive and managerial skills. The development of agro-industry based on food-processing, floriculture, horticulture and fruit production requires a highly skilled and disciplined labor force in order to meet international requirements for product quality. Management must be skilled in meeting production and delivery deadlines. The technology and science required for these industries differ in important ways from that considered important for the traditional professions of medicine, law and engineering.

At the same time, it will be important to resist limiting education to training in specific vocational skills. Paraguay's future is still murky, and resources too limited to afford making any mistakes. The "signals" that parents and students use to decide which education is most relevant will now come from all the countries of the region, and not just Paraguay (especially if employment opportunities in Paraguay are limited). Experiences in other countries suggest that the best education provides
graduates with general abilities of communication and analysis that facilitate learning of new skills.

Spending on higher education should be increased slowly, with increased emphasis on science and technology. The universities can be the base for generation of knowledge that contributes to the assimilation, adaptation and invention of new technologies of production and organization.

MERCOSUR also requires the education systems of the member countries to adopt common programs. Agreements to date include instruction of Portuguese and Spanish in all countries, common standards for certification of teachers, and development of a regional history. Under way is discussion of a common assessment examination for school leavers.

Planning of the national education system of Paraguay, for participation in a regional economic and political union, requires attention to factors today's planners ignore. These include population and migratory rates on both side of national borders, economic plans and projects that involve all the countries in the region, even cultural and political events and movements in other countries that can lead to demands on national education. Regional integration changes our understanding of national identity and sovereignty. The community for which education is to be planned is now larger and more complex.

ENDNOTES

1. Treaty of Asuncion, etc., my translation


3. A study carried out by Gallup for the Fundación de Investigaciones Económicas Latinoamericanas (FIEL) located in Asunción. The results were published in Coyuntura Económica, 7(75), 1992. p. 31.


5. Same source as endnote 3. In Argentina conditions for firing a worker "with cause" are the most restrictive of the four countries, and therefore are given a minus sign. In Paraguay labor legislation gives less power to unions, and allows employers more freedom in contracting. For example, employers can keep newly hired workers as "trainees" for up to 3 years. Paraguay is the only country of the four that does not have unemployment
compensation.
- = highest inflexibility, unfavorable for employer
+ = highest flexibility, favorable for employer

6. UNESCO, Educational Indicators, 1991

7. From note 3.


11. Even without official sanctioning of migration, there is a long-standing tradition of mobility across boundaries.


13. Based on a household survey conducted in the Metropolitan Area. Unemployed are defined as those persons 12 years of age or older recently laid off or looking for work.