Dragon Tales.
Can the Mercosur rely on the Chinese demand as its growth engine?

Víctor Peirone[1]

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[1] Msc in Political Economy (LSE) and economist of the Japan Bank for International Cooperation (JBIC).

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Introduction[2]

Few doubts can be posed on the leading role of the Chinese economy in the global arena. It is impossible to neglect the weight of China as the most important manufacturing platform for many industries and its increasing role in commodity markets. China is already the world's biggest consumer of many commodities, such as steel, copper, coal and cement, and the second-biggest consumer of oil so; any change in Chinese demand has a big impact on the world prices.

Several authors have emphasized the magnitude of the Chinese economy.

China is now the sixth largest economy in the world when its output is measured at market exchange prices; at purchasing power parities, it is of course larger still. It is the world's fourth largest trader. Reflecting its growth strategy, its exports have grown even faster than its economy, at rates in excess of 20 per cent per annum. As a result, Chinas's share of the world trade has risen from less than 1 percent two decades ago to 6 per cent today. (Eichengreen, 2004)

Since 1980, China's economy has grown by more than 9 percent a year. The country now manufactures 75 percent of the world's toys, 58% of the clothes, and 29 percent of the mobile phones. More than US$ 1 billion in foreign direct investment arrives each week. By 2008, China will be the world's third-largest exporter, and by the decade's end, its economy will be larger than that of either France or the United Kingdom (Pitsilis, 2004)

The Mercosur countries, particularly Brazil and Argentina, have experienced a significant increase in their sales to China. This has brought about a political debate on the need of a stronger alliance between the Mercosur and China.

In terms of agriculture, the emergence of China as a major market for agriculture products is seen by Latin America as an unprecedent opportunity given agricultural protection in the US and the EU, Latam's traditional major markets. Problems of market access, until now, were seen as a major impediment to achieving full potential of the region's comparative advantage in agricultural sector. Complementarity between Chinese goals of securing sources of food and Latin Americas's renewed desire to exploit its agricultural advantage make the Chinese – Latin America relationship potentially a very benefitial joint enterprise for the future. (Palacios, 2004)

This is the first time in the recent history that the relation between South America and an Asian country acquires a key role in the political agenda[3]. A bunch of politicians advocates their expectancies on the benefits of such partnership. The main intention of this paper is to counterbalance those expectancies. Four statements will be postulated as a way of offsetting such expectations.

First, the Chinese export and growth strategy highly depends on US consumption. If the US locomotive reduces its expansion, the Chinese wagon would reduce significantly its demands of commodities.

Second, the consensus among specialists is that China experiences an overheating. In the past, the Chinese economy has, by no means, experienced a "softlanding". The insufficient central (fiscal and monetary) power does not allow Chinese economy benefiting from internal macroeconomic coordination.

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[2] The author is indebted to the insights and comments of Atsushi Masuda, Luisa Palacios and Sergio Sesarin. Any flaws or errors are the sole responsibility of the author. The views expressed herein are those of the author and do not reflect the view of the Japan Bank for International Cooperation.

[3] Chile has been the only exception. This country has systematically included Asia as one of its priorities.

Third, commodity contracts cannot be easily enforceable under Chinese legal system. Some Mercosur exporters have underestimated the risk of contracting with the Chinese importers.

Fourth, when focusing on the Chinese market, the Mercosur export strategy would gain further volatility.

All the four statements are not entitled to neglect the obvious significance of the Chinese economy, but to comprehend the dynamic of the relation and to weight the different factors involved in it.

Our main objective is questioning the consistency of the export strategy focused primarily on the Chinese market. In order to accomplish our target the recent trading relation between the Mercosur and China will be shown. Then, the interaction between the US economy and the Chinese foreign trade will be analysed through a Vector Autroregression Model (VAR). Finally, the softlanding perspectives of the Chinese economy will be examined.

1. The Dragon and the Mercosur

The trade relation between the countries of the Mercosur, mainly Argentina and Brazil, and China performed a stable path before 2001. Since them, the trade flows between the Mercosur and China have augmented significantly. As the following charts show the exports from Argentina and Brazil to China grew three and four times from the previous averages.

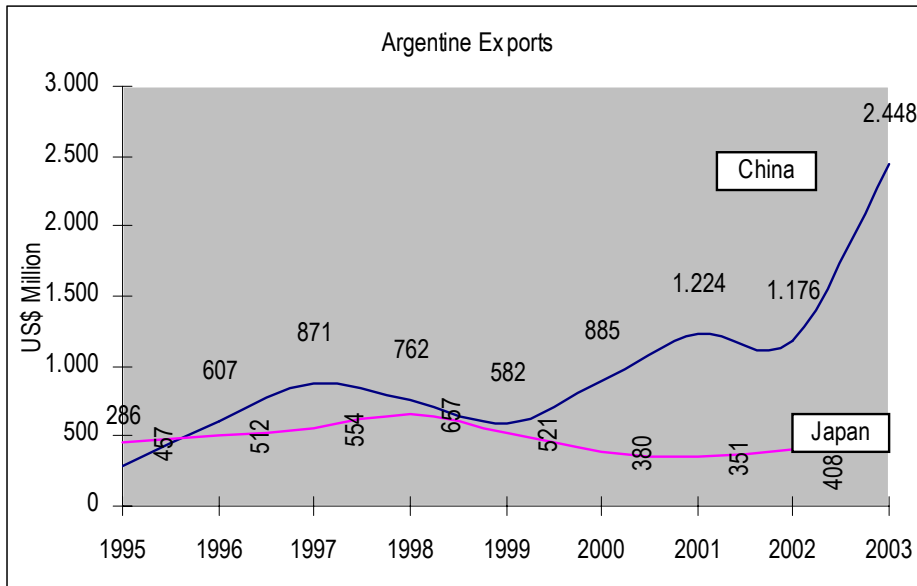**Chart 1: Argentine exports to China (1995-2003)**
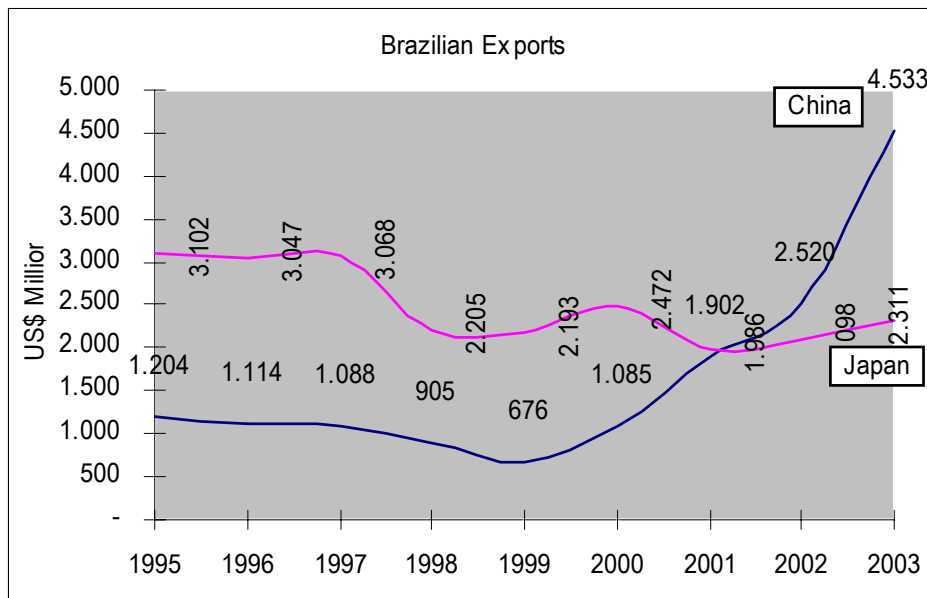

Chart 2: Brazilian exports to China (1995-2003)

One possible explanation for the impressive expansion of the Mercosur-China commerce is that trade profiles of the countries became more "complementary" over time.

The so-called "trade complementary index" can show how well the export profile of one country matches the imports of other. Furthermore, changes in the index over time can help to determine whether their trade profiles are becoming more, or less, compatible.

The index of trade complementarity between two countries k and j (Ckj) is defined as,

$$C_{ij} = 100 - \Sigma \left(\left| m_{ik} - x_{ij} \div 2 \right| \right)$$

Where xij is the share of the good i in the exports of the country j, and mik is the share of good I in the imports of the country k. The index is zero when no good exported by one country is imported by the other, and 100 when the export-import shares exactly match. As such, it is assumed that high idex values indicate more favorable prospects for a successful trade arrangement between countries. Michaely (1994) used the index to assess prospects for Latin American trade arrangements.

A research conducted by FIEL (Cristini, 2004) concludes that the level of complementarity between the Argentine and the Chinese economies is significantly lower than with the rest of the world. In other words, the argument of the complementarity cannot be easily transposed to the explanation of the Chinese import growth from the Mercosur. The welfare benefits of integration between the economies with a low complementarity, at least from the perspective of this analitical instrument, do not seem to be clear.

From the theoretical point of view, the complementarity would be also a methodology for measuring the impact of a foreseeable free trade negotiation between the Mercosur and China. Eventhough, from the political perspective this talks would be difficult to materialize[4].

Following the old tradition set by Viner and Meade, the impact of a preferential agreement on the trade flows and through them, on welfare may be clasified into trade diversion, trade creation and consumption effect. The agreement will be more relevant when the larger is any of these three impacts. The first, the trade diversion, works to lower the economy's welfare; the second and third, trade creation and consumption effect, work to raise the welfare effect. A preferential agreement is more likely to be relevant when (a) the higher is the home country's tariff level prior to the agreement; (b) the higher is the tariff level of the partner; (c) the larger is the economic size of the partner; and (d) the more diversified are the partner's exports; and (e) the more diversified are the home country's own exports. (Michaely, 1996).

China is a net exporter of farm products and competes with the Mercosur in manufactured goods. The complementary analysis is a different approach to traditional trade theory. Trade theory stresses the role of specialization and factor endowment. The complementarity tries to understand short-term adjustment and welfare gains.

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[4] The fact that Paraguay recognizes the R. of Taiwan is an obstacle.

2. Who's at the driving seat?

The idea that the leading role of the US economy can be dethroned by another nation has been present in the literature for a long time. After the Japanese "catching up" of the eighties, the European "common project" of the nineties and the current Chinese "locomotive", the expectancies have been based on many conjectures but few realities.

Over the past year, the world economy has grown by almost 5%, its fastest pace in two decades. Two-octane fuels have powered growth: America's exceptionally loose monetary policy, which has encouraged consumers to keep spending; and an unprecedent investment boom in China. Until the Federal Reserve started to lift interest rates in June 2004, money had been cheaper than even before. Average real interest rate are still at their lowest since the high-inflation 1970s. By slashing rates to 1% after the stockmarket bubble burst, the Federal Reserve saved America from a deeper recession and the risk of deflation. (Woodall, 2004)

The Chinese growth is linked to the US economy through three different channels. First, one third of the Chinese exports is directed to the US. Most of them are cosummer goods that went into the US retail chains. Between 1999 and 2003 they have grown at an average growth of 17% per year.

The following table summarized the imports of Chinese manufactured products from the US. Eigty percent of them are toys, computers, TV sets, cookware, textiles, etc.

Chart 3: Chinese exports to the US by product (1999-2003)

End-Use Code	1999	2000	2001	2002	2003	%	
(41120) Toys, shooting and sporting goods, and bicycles	11.178.819	12.609.090	12.394.019	14.848.506	16.557.155	0,11	
(21301) Computer accessories, peripherals and parts	7.273.720	9.101.778	9.606.082	13.177.115	16.095.867	0,11	0,21
(41050) Other (clocks, port typewriters, oth household gds	7.927.449	9.154.069	9.871.505	12.256.194	13.729.633	0,09	0,30
(40020) Apparel and household goods-other textiles	4.760.989	5.304.150	5.588.843	6.372.212	8.342.123	0,05	0,36
(41000) Furniture, household items, baskets	3.004.248	4.042.657	4.575.946	6.315.282	7.850.108	0,05	0,41
(40040) Footwear of leather, rubber, or other materials	6.149.181	6.642.521	7.150.036	7.444.999	7.782.297	0,05	0,46
(21300) Computers	40.818	1.456.468	800.258	1.597.319	5.918.683	0,04	0,50
(41200) Television receivers, vcr's & other video equip.	1.142.419	1.951.295	2.416.281	4.276.168	5.758.969	0,04	0,54
(41030) Household and kitchen appliances	2.016.406	2.507.303	3.000.864	3.679.384	4.691.610	0,03	0,57
(40030) Nontextile apparel and household goods	2.753.045	3.670.302	3.826.768	3.891.237	4.188.179	0,03	0,60
(41210) Radios, phonographs, tape decks, and other stereo	3.629.714	4.330.742	3.871.598	4.436.165	4.120.509	0,03	0,62
(21400) Telecommunications equipment	1.505.536	2.379.276	2.016.675	2.811.970	3.751.177	0,02	0,65
(20005) Electric apparatus and parts, n.e.c.	2.226.770	2.946.849	2.846.118	3.115.385	3.483.886	0,02	0,67
(40050) Sporting and camping apparel, footwear and gear	2.719.236	3.030.665	3.016.911	3.317.209	3.444.702	0,02	0,69
(40000) Apparel and household goods-cotton	1.974.188	2.034.364	2.088.588	2.809.565	3.372.115	0,02	0,72
(40140) Other products (notions, writing and art supplies)	1.946.316	2.071.663	2.136.454	2.445.591	2.831.914	0,02	0,73
(41020) Cookware, cutlery, house and garden wares, tools	1.428.114	1.732.937	1.847.400	2.222.496	2.588.925	0,02	0,75
(21500) Business machinery and equipment, except computers	1.234.797	1.288.213	1.082.309	1.266.514	2.550.047	0,02	0,77
(21190) Photo and service industry machnery & trade tools	952.885	1.219.975	1.479.764	1.918.468	2.414.149	0,02	0,78
(30230) Other parts and accessories	959.614	1.260.092	1.350.071	1.697.394	2.146.337	0,01	0,80
Others	16.963.955	21.284.020	21.311.847	25.293.292	30.817.712	0,20	
Total	81.788.219	100.018.429	102.278.337	125.192.465	152.436.097		

Second, China exports parts and unfinished products to its Asian neighbours whose final destination are the US market. Anthough this trade link is difficult to measure in statistics terms a significant portion of the Chinese sales to Japan, Korea and Hong Kong is devoted – after some transformation- to the US consumers.

Third, the foreign direct investment projects whose main target is supplying goods to the US market. Two thirds of the Chinese people are poor and with limited access to consumption of developed products. This is why the decision of plain field investments, in the short term, is mainly driven by the cost cutting stragtegy more than by the potential of domestic market.

The question is then how the US-Chinese link can affect the Chinese-Mercosur relation.

We propose a single model relating the US GDP growth (USy) the Chinese exports (CHx) and the the Chinese imports (CHm) as a possible explanation of the the Mercosur exports to China (MExCH) where:

$$\alpha MExCH = \beta CHm, \delta CHx, \chi Usy, \varepsilon$$

The underlying idea behind this is that the evolution of the Mercosur exports will depend on the dynamism of the Chinese exports and consequently on US economy. This will at the end affect the evolution of the Chinese imports.

In order to check our assumption we run a Vector Autoregression (VAR) with historical data (1983-2000) of the three mentioned variables.

The VAR is commonly used for forecasting systems of interrelated time series and for analyzing the dynamic impact of random disturbances on a system of variables. Through the VAR approach every endogenous variable is treated as a function of the lagged values of all the other endogenous variables within two lagged values.

Our VAR estimations output can be summarized as follows[5]:

Chart 4: VAR estimation output

Date: 08/26/05   Time: 23:52
Sample(adjusted): 1985 2000
Included observations: 16 after adjusting endpoints
Standard errors & t-statistics in parentheses

	CHM	CHX	USY
R-squared	0.690590	0.508365	0.309783
Adj. R-squared	0.484317	0.180608	-0.150362
Sum sq. resids	0.136203	0.089509	0.001440
S.E. equation	0.123019	0.099727	0.012650
F-statistic	3.347942	1.551042	0.673228
Log likelihood	15.42658	18.78506	51.82149
Akaike AIC	-1.053322	-1.473133	-5.602687
Schwarz SC	-0.715315	-1.135125	-5.264679
Mean dependent	0.168190	0.160247	0.033351
S.D. dependent	0.171309	0.110170	0.011794

The figures shown are the regression statistics for our VAR system. They may serve to understand our initial assumption. The Chinese imports are dependent on the evolution of the US economy.

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[5] The impulse response functions and residuals can be found at the end of the paper.

3. The softlanding perspectives

The consensus among specialist is that the Chinese economy has started to overheat. The combined effect of an expansive monetary policy, a poor banking regulation and a private overinvestment has forced the introduction of measures for cooling the economy. The Chinese government has taken several measures for restricting bank loans and it expected to succeed in its efforts.

A number of economists have recently called into question the sustainability of China's current rates of GDP and export growth. These observers have tended to point out the shortcomings of China's "socialist market economy", focusing on the inability of the government ta raise revenue by taxing the new private economy, the problems of the government has encounter in reforming the state owned enterprises, the distortions created by China's duslistic trade regime, and the mounting "non performing loans" problem in the Chinese banking sector. (Branstetter, 1999)

Chinas's rush for growth has put straints on the economy, including pressure on prices. In an attempt to cool off the economy while avoiding a destabilizing slump in growth (say to less than 7 percent), the authorities have so far eschewed broad macro measures such as increased day interest rates, fiscal retrenchment or exchange rate appreciation. Inestead during the first half of 2004 China has tended to take selective administrative measures (for example directives to state bankss on the allocation of lending, restrictions on land access for certain investment) in an effort to slow down specific strained sectors of the economy. It remains to be seen how well this selective experience will work (IADB, 2004)

Regarding historical experience, the growth of the Chinese GNP can be examined in order to indentify the fall periods in this economy. In a lapse of 17 years, the Chinese economy experienced four falls (1985-87, 1988-90, 1992-93 and 1995-98). This means that the economy was falling two thirds of the time. The following chart shows the evolution of the Chinese GNP from 1983 to 2000.

Chart 5: Chinese GNP evolution (1983-2000)
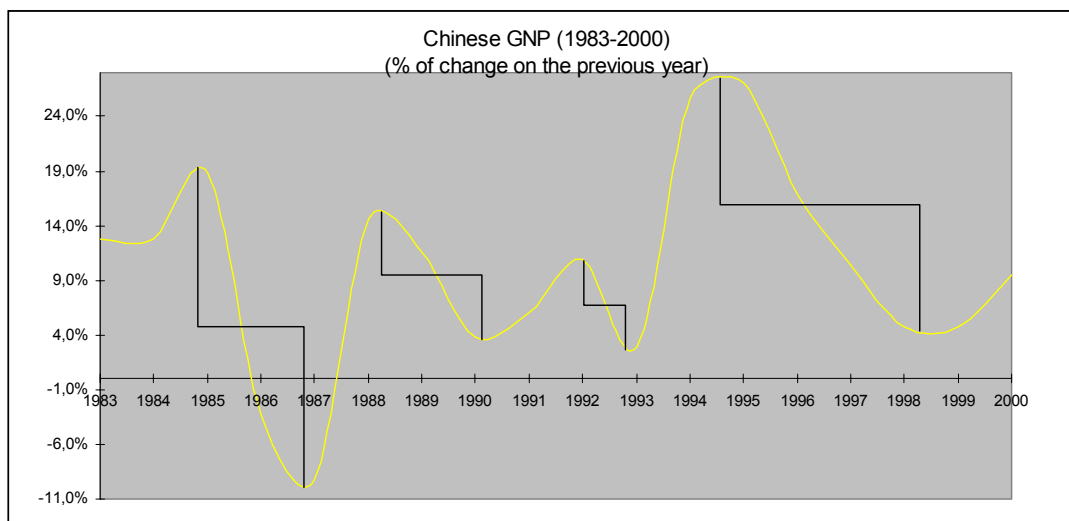
Considering these selected periods, the average yearly fall in the GNP was 17% and the fall in imports was 33%. In other words, for every point of fall in its GNP the Chinese imports decreased almost two percentage points.

The following chart summarizes the accumulated fall in the four selected periods.

Chart 6: Chinese GNP and imports (in selected periods)

Fall	Fall from peak (in %)	
	GNP	Imports
1985-87	28,2	60,0
1988-90	10,8	39,3
1992-93	7,1	7,0
1995-98	22,4	26,1

Most of the analysts tend to underline the average growth of the Chinese economy. Even though the average growth of this country has been quite impressive, we would like to highlight its standard deviation as a sign of concern. The fact that the falls of the imports in the selected periods were two times more accentuated than those of the GNP augments our apprehension. The Mercosur export strategy based on a greater dependence of its exports to China is supposed to add further volatility to the growth of this region.

4. Conclusions

Our initial intention was trying to understand the dynamic of the Chinese economy as a way of explaining the possible path of the Mercosur exports to this market. Based on the route traced we can conclude that, in the short term, the expectations posed on the evolution of the Mercosur exports to the Chinese Market may have been overstated.

On one hand, the prospects of the Chinese foreign trade tend to be highly dependent on the US economy. If the monetary conditions tighten, the evolution of the consumption in the US economy, and therefore of the Chinese foreign trade, would be seriously affected.

On the other hand, the aparent overheating of the Chinese economy contrast with the skills needed for managing a softlanding. At least from the historical perspective, it seems highly improbable that a softlandng would occur.

In conclusion, from the two different stand points analysed, it can be said that the high volatility of the Chinese economy, and consequently, of its imports, will add further uncertainty to the Mercosur insertion in the global economy. Two additional points may be added in order to have a more comprehensive explanation.

4.1. The law and trade

A hidden aspect of the relationship between the Mercosur and China is the issue of the enforceability of international contracts. The trade of commodities depends highly on this factor. Since the negotiation of the contract and the final arrival of the goods to destination passes several months. In this lapse, the prices of the goods shipped may suffer changes.

The question is whether these contracts can be enforceabled under Chinese legal system or not. It is widely known that, after a first experience of reversals in soybean shipments, several exporters of the Mercosur have stopped their sendings to this market.

A judicial system such as Chinas's is hardly immune from corruption. More generally, however, the problem of corruption in China steems from the omnipresence of the state in its attempt to control economic decisions so as to preserve the power of the Comunist Party. The reform porcess initiated in the late 1970s has prompted a continuous conflict... (Loria 2005)

4.2. An strategic or unplanned partnership?

The relationship between the Mercosur and China has gained public attention after several events occurred.

First, Brazil, China and India joined the BRIC group. The BRIC alliance was launched in order to position these countries as relevant players in the global sphere. Second, the Chinese-Mercosur joint position against farm subsidies has stalled the multilateral trade talks. Third, a wave of investments was announced after the president of China visited the region at the end of 2004.

A further scrutiny on the complementarity among these economies would help to estimate the welfare impact of a prospective trade alliance. It seems to be likely that the confrontation would prevail on a posible cooperative environment.

References

Branstetter, L. and Feenstra, R., "Trade and foreign investment in China: a political economy approach", NBER Working Paper 7100, April 1999.

Cristini, M. and Bermúdez, G., "La nueva China cambia al mundo", Documento de Trabajo Nro 81, Setiembre 2004.

Eichengree, B., Rhee, Y. and Tong, H., "The impact of China on the exports of the other Asian countries", NBER Working Paper 10768, September 2004.

IADB, "The emergence of China: opportunities and challenges for Latin America and the Caribbean", October 2004.

Loria, Eduardo, "Should Latin America fear China?, IADB Working Paper 531, May 2005.

Palacios, L. "Understanding the linkages between Asia and Latin America: A look at Japan-China relations in Latin America", JBIC Special Report, December 2004.

Pitsilis, V., Woetzel, J. and Wong, J., "Checking China's vital signs", The Mackinsey Quarterly, 2004 Special Edition: China Today.

Woodall, P., "The dragon and the eagle", The Economist, October 2, 2004.

Chart 7: VAR Impulse and response functions and residuals

Response to One S.D. Innovations ± 2 S.E.