Comments

Luis F. López-Calva: In their paper, Ernesto López Córdova, Alejandro Micco, and Danielken Molina estimate elasticities of substitution for Chinese versus Latin American imports in the U.S. market, and simulate the effect of three different scenarios on the composition of U.S. imports. The scenarios are the revaluation of the Chinese currency, a total liberalization in U.S. trade flows (FTAA scenario), and the elimination of quotas on apparel and textile exports under the Multi-Fiber Agreement (MFA). The analysis is methodologically solid and adds to the literature, especially in terms of understanding the regionwide competitive position from the Latin American perspective. The key point of the paper is thus the study of trade competition between China and Latin America in the U.S. market, a crucial theme for the region in the medium term. Among the results, a very important finding has to do with the revaluation of the Chinese currency, given that several recent studies estimate the realignment to be around 40 percent. The paper suggests that a realignment would reduce Chinese imports to the U.S. by 20 percent.

The econometric estimation follows a well-established procedure, but the paper enhances solutions of the bias induced by the endogeneity of the price variable. Estimating the elasticity of substitution in the demand equation, which includes the demand for imports from each country, involves potential endogeneity related to the price level of the imported good. The authors employ an IV solution, using three instruments for robustness: transport costs, import tariffs, and input prices (that is, wages, cost of inputs, and cost of capital). The third instrument, however, requires detailed input-output (IO) data. This raises serious doubts regarding the quality of this information. In Mexico, for example, the data are updated from an IO matrix originally constructed in 1980. IO data have similar quality problems in several countries. Nevertheless, the authors correctly address some potential problems of the instruments given the existing data, and robustness checks are important in that respect.

A more general problem related to general equilibrium effects is that input prices could suffer from endogeneity, as well (that is, an increase in exports could increase input prices). The paper therefore includes a first-stage specification to ensure that the instruments reflect the differential effect of input prices across goods, with different input requirements per economic sector. Finally, the potential endogeneity of transport costs with respect to export volume is solved by regressing transport costs against the good price and using the residual as an instrument. The instruments generally seem to work well, suggesting that the exercise provides the best feasible analysis, given the existing data at hand.

The paper adds to the literature by carrying out first the standard exercise of allowing elasticities to vary across sectors while keeping within-sector elasticities constant, but then furthering the empirical analysis by allowing within-sector elasticities to vary. This within-sector variation is crucial for the accuracy and interpretation of the simulations.

The results are intuitive and compare fairly well with related work. An obvious caveat, however, relates to the general equilibrium implications of the hypothetic scenarios, which are not necessarily grasped in the structure of the analysis. In different contexts but based on similar assumptions, general equilibrium exercises have been shown to result in higher elasticities of substitution compared to previous literature; this tendency is related to the need to distinguish between short- versus long-run elasticities.¹ The bias in the magnitude of the elasticities stems from the fact that all the resource reallocations induced by demand shifts are taken as partial equilibrium adjustments.

The paper would be strengthened by a more careful analysis of some of the strong results. For example, the realignment of the renminbi (by 20 percent) reduces Chinese exports to the United States by a fifth, while increasing Latin American exports by only 0.5 percent. What could be driving the loss of competitiveness of Latin America with respect to the rest of the world? Moreover, the authors do not address the repositioning of countries within Latin America in terms of trade with the United States. For example, South America has the largest gains in some simulations, while Central America best enhances its relative position in others. Clearly, the different scenarios are not neutral in terms of the intersectoral composition of imports, thus reflecting relative changes consistent with patterns of specialization by subregion.

This type of exercise could shed light on intraregional gains and losses, to further our understanding of the coalitions formed around issues like

1. Wear (1990).

FTAA-related schemes. Although the purpose of the exercise is to examine Latin America as a whole, and the methodology is shaped accordingly, researchers and policymakers alike know that Latin America does not compete against China as a monolithic group. Rather, specific countries are looking to enhance their relative positions. Overall regional competitiveness is important analytically, but it has little relevance for those making decisions and discussing the use of specific policy instruments.

Peter K. Schott: China's penetration of world markets has been unprecedented since its opening to international trade in the 1980s. Between 1972 and 2005, for example, its share of U.S. manufacturing imports rose from essentially zero to 19 percent. Over the same period, the manufacturing market share of all of Latin America increased from 3 to 14 percent, while the share of OECD economies declined from 83 to 48 percent.¹ China has achieved this growth by extending the range of products it exports, as well as by increasing its exports per product. By 2005, China was present in 85 percent of all U.S. manufacturing product import markets. Latin America and the OECD, by contrast, were present in 69 and 97 percent, respectively.

López Córdova, Micco, and Molina explore the implications of Chinese export growth for Latin America by investigating the intensity with which Chinese and Latin American exports compete in the U.S. market. In particular, they estimate how Latin American export volumes would respond to four policy experiments: a 1 percent decline in the price of all Chinese exports; a 20 percent appreciation of the renminbi; an elimination of U.S. import tariffs on Latin American exports; and the elimination of quantitative export restrictions under the global Multi-Fiber Arrangement (MFA). The first three experiments do not (yet) have any real-world analogue; the results of the last experiment, however, can be compared to the actual response of Latin American and Chinese textile and apparel exports to the United States in 2005, the first year following the removal of the MFA restrictions.

In the first part of the paper, the authors use a standard approach to estimate the elasticity of substitution between exports from China and other countries, taking into account the techniques by which countries manufacture their exports. While the latter detail is a nice contribution to this literature, it necessarily restricts the range of countries for which data are available to just eleven. In the second part of the paper, the authors use their estimated elasticities to

1. Schott (2008).

Experiment	China's exports	Latin America's exports	U.S. imports
1 percent decline in China's import prices	3.7	-0.1	0.3
20 percent appreciation of the RMB (6 percent price increase)	-22.1	0.5	-1.7
Elimination of Latin American import tariffs	-0.3	3.1	0.4
Elimination of MFA quotas	40.3	-2.8	2.2

T A B L E 12. Summary of López Córdova, Micco, and Molina's Results Percent

MFA = Multi-Fiber Arrangement; RMB = renminbi.

back out the change in Latin American and Chinese export volumes mandated by the price changes implied by the above experiments. The authors are careful to stress that their results ignore potentially important general equilibrium effects.

The basic results of the authors' experiments are summarized in table 12, which shows that the appreciation of the renminbi and the abolishment of the MFA induce the largest responses on the part of China and U.S. imports. As mentioned above, the results of the latter experiment provide a rough gauge of the usefulness of the authors' approach, since they can be compared to actual outcomes associated with the abolition of the MFA. The authors predict that the elimination of U.S. textile and apparel quotas will result in a 40 percent increase in Chinese textile and apparel exports and a concomitant 3 percent decline in Latin American exports of these products. In fact, total Chinese textile and apparel exports fell 5.3 percent, as displayed in figure 1.² The actual U.S. import response was much stronger than predicted, growing 9 percent instead of the estimated 2 percent.

A key message of table 12 is that relatively large swings in Chinese export growth do not imply similarly large swings in Latin American export growth, and vice versa. This outcome is influenced, in part, by the fact that China and Latin America incompletely specialize in different sets of goods: as noted by the authors, China's exports lean toward manufactured products, while Latin American exports are relatively more resource based. An interesting avenue to explore in future research is how exports of raw materials from Latin America to China respond to the types of policy experiments noted in the

^{2.} Brambilla, Khandelwal, and Schott (2007) These growth rates are for all textile and apparel exports, whether or not their quotas were already relaxed in prior rounds of the phase out of the MFA. Chinese exports of the textile and apparel products bound by quotas in 2004 grew in excess of 150 percent in 2005.





Source: Brambilla, Khandelwal, and Schott (2007). a. In billions of square meter equivalents.

paper. Anecdotal evidence of Chinese firms' seeking to secure access to raw materials in Latin America and Africa abounds.

Another generalization worthy of exploration is vertical differentiation. Countries' export prices are correlated with their level of development.³ This correlation has been interpreted as capturing vertical differentiation in terms of quality or other hedonic attributes: capital- and skill-abundant countries use their endowment advantage to produce vertically superior varieties that are relatively capital or skill intensive and possess added features or higher quality, thereby commanding a relatively high price. Chinese export products generally sell at a discount relative to Latin American products in the U.S. market.⁴ It would be both useful and interesting to estimate elasticity parameters that allow for differential substitutability between high- and low-quality products, as well as to investigate the extent to which vertical differentiation.

4. Schott (2003).

^{3.} See Schott (2004); Hummels and Klenow (2005).

might rise or fall endogenously as a result of the types of policy experiments outlined above. Removal of U.S. import quotas, for example, might prompt changes in the quality of textiles and clothing China exports to the United States, which might prompt a reaction by Latin American firms.⁵

Finally, although the paper does a good job at highlighting the responsiveness of Latin American exports to changes in their own and other countries' export prices, it would be useful to relate those outcomes to changes in welfare. Such changes undoubtedly depend a great deal on the particular channels of trade that are modeled, but guiding the reader through these relationships would be quite instructive.

5. Aw and Roberts (1986); Feenstra (1988).

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