

Comment

Roberto Chang: This is a very engaging paper that documents and quantifies how China's increased role in world trade has enhanced the impact of China's shocks on the rest of the world, especially Latin America. The authors are to be commended for shedding light on this development, which may reshape the way we think about the future of macroeconomic dynamics in Latin America.

The paper is quite useful on a number of fronts. First, it describes how China has become a more important trading partner of perhaps every country in the world. Table 1 of the paper is quite an eye-opener in this regard: it shows that China's share of U.S. trade, for example, increased from 5 percent in 1995 to 18 percent in 2009. For euro area countries, the Chinese trade share increased from 4 percent to 15 percent; for the five Latin American countries in the sample, it grew from 2 percent to 12 percent. This is a striking development in the world economy.

Second, the paper implements a novel method for quantifying how the rising importance of China in world trade affects the transmission of shocks across countries. The method is called a global vector autorregressive (GVAR) model, and it essentially consists of estimating a separate augmented VAR model for each country and then linking them for analysis. The crucial aspect of the procedure is that each country's VAR includes a weighted average of other countries' variables, which allows for the study of interesting questions by cleverly choosing the weights. In estimation, observed trade shares are used as the weights. The implications of the estimated model, such as impulse responses, can then be examined by assuming alternative weights. In the paper, impulse responses are computed with four different sets of trade weights, those corresponding to 1985, 1995, 2005, and 2009.

The results are revealing and quite intuitive. Figure 3, in particular, displays the impulse responses to an unexpected one percent increase in China's GDP. In almost all cases, the magnitude of the responses has increased dramatically, especially after 2005, both in the short run and in the long run. For

the Latin American sample, the effect on impact increased from about 0.08 in 1985 to 0.23 in 2009, and the long-run effect from about 0.03 to 0.15. For the United States, the effect has tripled in the long run. The exceptions are India and (surprisingly) Peru, but the pattern is clear.

There is more here than meets the eye. The paper decomposes the impact of a Chinese GDP shock on, say, Latin America into two parts: the direct effect on Latin American countries; and an indirect effect stemming from the shock's effects on the United States and Europe, which heightens the impact on Latin America, presumably via trade. This significantly increases the appeal of the empirical exercise; otherwise, one could have conjectured that the changes in the impulse responses in figure 3 and elsewhere in the paper were simply reflecting the increased weight of China in each country's VAR, which would naturally result in a stronger impact of a Chinese shock in each country. However, the results of the decomposition reveal that the indirect effect is, if anything, stronger than the direct effects.

The dominance of the indirect effect, the authors point out, highlights "the strength of the general equilibrium dynamics that the GVAR modeling strategy captures." This seems correct, but then the intriguing issue arises of whether one really misses much by ignoring the increased importance of China, at least from the viewpoint of modeling Latin American macroeconomic dynamics. One possibility is that the impact of the rest of the world on Latin America could still be captured by restricting attention (as is often done) to U.S. and perhaps euro area variables, as proxies. The increase in China's importance might then be captured quite accurately through the changes in the dynamics of the proxies resulting from such development. But then there would be no need to worry too much about the general equilibrium dynamics mentioned by the authors.

The paper suggests a number of other, very good avenues for research. One of them is whether and how the results would change if the crucial weight matrices were based on financial considerations rather than trade considerations. The authors defend their choice in the paper, but clearly the difference may be of interest, if only because the recent literature has emphasized financial crises, sudden stops, and the like. Another question, also discussed by the authors, is the identification of structural shocks. One might want to use this framework to ask, for example, how the rise of China has affected the transmission of Federal Reserve policy to Latin America and elsewhere, a question that has received renewed attention recently.

This being said, I again want to thank the authors for writing this paper. I am confident that it will become a basic reference on this increasingly relevant topic.

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