Can Measures of GTC Explain CMEA Integration?: A Reply

Joseph Pelzman, George Washington University

Available at: https://works.bepress.com/joseph_pelzman/15/
CAN MEASURES OF GROSS TRADE CREATION EXPLAIN CMEA INTEGRATION?
A REPLY

Joseph Pelzman*
University of South Carolina

Brada and King (hereafter BK) [1980] have raised two very interesting points concerning the applicability of gross trade creation (GTC) estimates as indicators of CMEA integration. Their comments are a reaction to the conclusions raised in my recent article in this Bulletin, Pelzman [1976], where I show that during the period 1965-1970 the "CMEA countries experienced a cumulative growth in gross trade creation." These residual GTC effects were attributed in the paper to CMEA integration given the highly restrictive assumption that the effects on both intra-CMEA and inter-CMEA trade of changes in competitive position and liberalization were small relative to the effects of integration.

BK's basic objective is to refute this conclusion and to argue that GTC effects may have been more important in the pre-integration period 1954-1959 rather than in the post-integration period, 1965-1970. The intent of this paper is to argue that their criticisms, although initially appealing, are in fact incorrect.

BK's comments raise the following questions:
1. Does the use of intra- as well as inter-CMEA trade flows, to develop the hypothetical anti-mode, bias the GTC estimates?
2. Are estimates of GTC accurate reflections of CMEA integration?

*This paper was written while the author was a Brookings Economic Policy Fellow assigned to the US Department of Labor, Office of Foreign Economic Research. The author alone is responsible for the contents of this paper.
With respect to the first question, BK argue that equation 1, Pelzman [1976, p. 40], when estimated with both intra- and inter-CMEA trade flows, will result in biased estimates of GTC. Given the restrictions on inter-CMEA trade placed by both Western governments and by quality considerations, it is possible that the fast growth of intra-CMEA trade was partially at the expense of slower growth in inter-CMEA trade. If these restrictions were creating an abnormal inter-CMEA trade pattern, then I would agree with BK that this would have been a serious problem since inter-CMEA trade was used to estimate the anti-mode. In such a case East-West restrictions which would depress inter-CMEA shares would create some overestimation of the integration-induced growth of intra-CMEA trade.

However, as Brada and Wipf [1974, p. 47] have demonstrated, during the period 1961-1969 Western restrictions on exports to the Soviet bloc "covered mainly military hardware and munitions, nuclear energy equipment and selected items of advanced technology." To a large extent restrictions on Soviet bloc exports to the West were a function of their poor quality [Holzman, 1976, ch. 4]. Therefore, I feel that using both intra- and inter-CMEA trade to estimate the anti-mode does not bias the GTC estimates, nor does it add "an arbitrary element in the estimate of GTC," as BK suggest.

Furthermore, it should be noted again that the intent of my original article was to determine if CMEA had led to trade integration within COMECON. This was done by relying on a single measure of integration, namely, gross trade creation. Moreover, as was noted in that article, GTC refers to increases in intra-area trade regardless of whether this is due to substitution for domestic or for foreign sources of supply. Given the dubious nature of East-West restrictions during 1960-64, excluding the inter-CMEA observations in an estimate of the anti-mode would amount to evaluating CMEA trade flows in a vacuum. This would clearly invalidate any estimates of GTC.

With respect to the second question, BK are correct when they restate a point made in the original article that the finding that actual intra-CMEA trade exceeds hypothetical trade, calculated under the assumption of an unchanged composition of inter-CMEA trade, is compatible with both trade creation (TC) as well as trade diversion (TD). In fact, my original paper only argued from a single measure of trade integration, namely, gross trade creation, which included both TC and TD.
effects. They are, however, incorrect in arguing that "only if GTC increased more rapidly than total trade could we possibly conclude that integration was increasing." The pitfall of arguing from a comparison of the relative growth of GTC to total trade is that a rise in GTC trade as a proportion of the total (intra- and inter-) CMEA trade may be explained by changes in the importance of the CMEA in world trade as well as by changes in its competitive position. In order to abstract the integration effect from the influence of the latter factors one must make a comparison between actual and hypothetical trade flows. The latter being calculated under the assumption that the effect of changes in competitive position and trade liberalization on intra-CMEA trade has been small relative to the effects of integration. If we assume that integration is a cumulative process, then for our conclusion, it is sufficient to show that estimates of GTC are increasing from year to year. That is, in fact, what was demonstrated in the paper.

Given BK's concern with the possible bias in comparing the 1960-64 generated anti-mode with actual trade flows, it is surprising that they have conducted the experiment for the 1954-1959 period. Surely during this latter period the restrictions on East-West trade under the COCOM embargo were much more severe than in the post-1965 period, or for that matter, the 1960-64 period. Under these circumstances it is indeed not surprising that the proportion of GTC to total trade was so high. What this implies is, simply, that the constraints on inter-CMEA trade were so severe that if the CMEA members were to trade at all it would have to be confined to the CMEA group. Consequently, a comparison of the 1960-64 generated anti-mode with actual 1954-1959 data would be merely a reflection of the differences in the structure of East-West trade caused by, among other factors, the easing of East-West restrictions between 1954-59 and 1960-64. Their results would not, however, demonstrate, as BK have posited, that "there is no evidence," using the methodology presented in my article, "that CMEA integration had led to the impact on the geographical distribution of trade flows usually associated with 'customs union' effects."

In response to BK's concluding statement that "neglecting such other measures as the changing degree of intra-branch specialization in certain industries" and relying only on "shifting patterns in the
geographical distribution of overall trade" does not present "an adequate basis upon which to estimate the degree of integration," one must point out that international trade is a reflection of a country's specialization pattern. As such, an ex-post comparison of the anti-mode with actual CMEA trade provides a good approximation of the gross trade-creating effects of CMEA integration.
Bibliography


