2003 - Number 16

## Border Effects

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The law of one price states that identical goods sold in different countries should sell for the same price when prices are expressed in a common currency. If, for example, pencils were cheaper in Canada than in the United States, individuals could purchase them in Canada and sell them in the United States at a profit. Such actions would raise the price in Canada and lower the price in the United States. In reality, factors such as transportation costs and other barriers to trade (such as import restrictions) limit the law of one price.

One way the Internet should reduce deviations from the law of one price is by reducing the search costs required to determine the lowest price. Consider, for example, a popular on-line bookseller that operates in Canada and the United States. One can access the Canadian or U.S. website to order books for shipment to addresses in either country. A key difference between the websites is that prices on the former site are listed in Canadian dollars and prices on the latter site are listed in U.S. dollars. Nonetheless, one would expect that the prices for an identical book, when converted into either currency, are identical.

To test this, I compiled a list of the 20 most popular books sold on each site. Three books appeared on both lists and four books on the Canadian list were not available on the U.S. site, resulting in 33 books in the sample. I then examined the prices of these books on each website. None of the 33 books had identical prices when converted into a common currency. In 6 cases the Canadian price was lower and in 27 cases the U.S. price was lower.

The chart illustrates this result. If prices were identical in the two countries, all points would lie on the 45-degree line. Points below the line indicate that the price is lower in Canada; points above the line indicate that the price is lower in the United States.

Now, a lower sales price does not necessarily result in a lower final price for the consumer. To receive the book, the consumer must pay shipping costs. Of course, the cost of domestic shipping is lower than the cost of international shipping. For 3 of the 6 books in which the Canadian sales
price was lower and for 10 of the 27 books for which the U.S. sales price was lower, the additional shipping costs eliminated the price advantage of buying across the border.

For the 20 books where the price advantage of a crossborder purchase remained, the savings per book ranged from $\$ 0.22$ to $\$ 5.25$. The average savings was $\$ 1.91$ or 7 percent. Credit card fees on foreign currency transactions (typically 1 to 3 percent) will reduce these savings to the consumer. In addition, the time involved in converting prices to a common currency and the extra shipping time for cross-border purchases reduces even further the incentive for consumers to take advantage of the small savings on these book purchases. Thus, while differences in book prices across the border appear to violate the law of one price, factoring in other costs makes the differences mostly negligible. The law of one price appears to be a reasonable, if imperfect, description of international prices for books in this case.


