

Even in a perfectly globalized world, distance still matters

BY WILLIAM WATSON

This academic term I'm teaching a course on international trade policy. Globalization — how the world is becoming one big market — naturally features prominently. So it was more than a little ironic that the book I'm using, which is published in Washington, D.C., took more than eight weeks to get to Montreal. It was held up at the border, it seems.

That "national borders matter," even in the 21st century, is the subject of a worldwide research agenda prompted by rookie Liberal MP John McCallum, who, back in the mid-1990s, when he was still an economics professor at McGill University, published an article of that name pointing out that the trade between Canadian provinces was 20 times greater than you'd expect if we had perfect globalization. That estimate has since been reduced to 12 times or so, partly as a result of the Canada-U.S. Free Trade Agreement. But 12, while less than 20, is still a big number.

Now new research just published in the *Canadian Journal of Economics* by German economist Volker Nitsch (yes, Don Cherry: We let foreigners into our academic journals) shows that national borders still count a lot in Europe, as well. Trade within European countries is — or at least was in 1990, the last year for which Nitsch has data — eight to 10 times larger than it should be.

How do you figure out how large trade flows "should be"? This way:

If we did have perfect globalization, so that borders had no effect on trade, it still wouldn't be the case that anyone would trade with anyone. Distance would continue to be important. All else equal (economists' favourite phrase!), countries that were close to each other would probably trade more than those that were far apart. Why go to Australia to buy something you could pick up in the United States? FedEx and UPS have made the world smaller, but they still charge (roughly) by the mile.

You're also more likely to trade with economically big countries than little

ones — with Australia more than Borneo. Big countries have more consumer wealth with which to buy your products, as well as a larger share of world output for you to buy from them.

Size and distance as determinants of trade give rise to the "gravity model" of trade. Just as different planets' size and relative distance determine how much gravitational pull they effect on each other, so, too, in a perfectly globalized world, would different economies' size and distance from one another determine how much they'd trade with each other. National borders wouldn't matter.

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How does the gravity model do in explaining trade? Pretty well. If you take a bunch of countries and estimate the numerical effect of miles and GDP on their trade flows, and if you then use those estimates to predict how much two other countries should be trading, the estimates aren't perfect, but generally speaking they're pretty close. Any time economists get "pretty close," we're more than happy.

So how do you test the effect of national borders? You use your gravity model estimates to predict how much trade there should be within a country, given the distance goods have to move inside the country. When you do that, the results aren't "pretty close." They're bloody awful. The model dramatically underpredicts the amount of within-country trade that is actually observed.

When John McCallum compared interprovincial trade flows he found they were much, much bigger than they "should be." For instance, Ontario is roughly the same distance from British

Columbia as from California, so it should trade 10 times more with California than B.C., since California's economy is 10 times bigger than B.C.'s. But McCallum found that, in fact, Ontario was trading three times more with B.C. than with California — in other words, 30 times more than it should.

His data were for the late 1980s and both more recent data and more sophisticated estimates of trade flows (taking into account still other variables) brought the estimate down to 12 times more within-Canada trade than there should be by the mid-1990s, which is what you'd expect as the FTA made itself felt. But there the number has more or less stayed: 12 times more trade with ourselves than there would be if national borders didn't matter and only size and distance determined trade flows.

Canada and the United States are two of the world's closest trading partners. As the economist Paul Krugman put it, many parts of Canada are closer to the United States than to Canada. And our border, as presidents and prime ministers invariably remind us when they get together, is one of the most permeable in the world. So if it still counts for a lot, imagine how much other borders must count, and how very far we are from "the borderless world" the gurus talk about.

And now here comes Volker Nitsch with estimates that for the European Union, another closely-knit group of countries, the "home bias" is between seven and 10 times. It has been dropping, mind you. Between 1979 and 1990, the years Nitsch studies, it fell about two points. Maybe the decline accelerated after the single market project of 1992, and maybe it will fall even more with the full adoption of the euro. But after three decades of European integration, it was still much higher than most people would have predicted.

By 2050 maybe we'll have one world/one market. But until then I'm going to keep ordering my textbooks early.

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