Technical Annex to the *Economic Note*

"The Dilemma of Taxing Online Purchases"
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The Specific Issue of Packages

Canada imposes the lowest threshold of all Western countries[1] for the application of customs duties and sales taxes to imports of small parcels ordered over the Internet, namely starting at a value of C$20. In the United States, for example, sales taxes are only applied to imports starting at a value of C$266. In Mexico, it's at a value of C$66.[2] Canada is therefore much stricter when it comes to applying these taxes than what prevails elsewhere.

Collecting these taxes on low-value imports has a cost, which is unfortunately not calculated in Canada. In Europe, collecting these sales taxes on postal imports costs three times more than what they bring in. Revenues from these taxes would cover the costs related to collecting them only for imports worth at least C$113.[3]

Furthermore, very low thresholds for the application of these taxes can be prohibitive for small and very small companies that either get their supplies or deliver their products over the Internet.

Obstacles Related to the Collection of These Taxes by Financial Intermediaries

Some people suggest that credit card companies and other financial intermediaries could become collectors of these taxes. However, several technical considerations make this solution difficult to apply.

In order to calculate whether or not to apply which taxes, a financial intermediary would have to have access to a detailed receipt, in order to be able to determine if the products purchased were taxable or not, and if the taxes have already been applied or not, but also several other complementary bits of information like the delivery address, if it is different from the billing address or not, if the buyer of the online product was on Canadian soil at the moment of purchase or not, whether or not it is a gift, whether the seller has sales of more or less than

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[1] Apart from Iceland, Switzerland, and the Principality of Andorra.

[2] Global Express Association, "Overview of de minimis value regimes open to express shipments world wide," August 4, 2013, pp. 2 and 3; Bank of Canada, Daily Currency Converter, November 17, 2015.

[3] Juha Hintsa *et al*., *The import VAT and duty de-minimis in the European Union: Where should they be and what will be the impact?—Final report*, Cross-border Research Association, in co-operation with HEC University of Lausanne and University of Bamberg, October 14, 2014, p. 34; Bank of Canada, Daily Currency Converter, November 24, 2015.

C$30,000, etc.[4] Not all financial intermediaries have access to all of this information, and the impossibility of some of them having access to it would create avenues for tax avoidance, without resolving the problem.

Perhaps even more importantly, money is not transferred by credit card companies; they simply determine whether or not to authorize transactions. Money goes from one bank to another. Imagining that credit card companies could easily collect taxes reveals a profound misunderstanding of how the payments system functions.

Preferential Sales Tax Rates for Online Purchases

In the *Economic Note* connected to this Technical Annex, one of our suggestions is to apply a reduced sales tax rate to purchases made online. In the context of this study, the goal is thereby to minimize the advantage of foreign Internet retailers that do not directly collect sales taxes. Beyond this consideration, there are technical arguments in favour of a preferential sales tax rate for online purchases,[5] and others that run counter to them.

Preferential sales tax rates for online purchases are desirable if goods are perceived by consumers as being intrinsically different. That is to say, if consumers consider that a good X purchased on the Internet is “different” from the same good X purchased in a physical store. In fact, the theory of optimal taxation does not generally propose that uniform taxes be applied to all goods, regardless of whether they are intermediary goods or consumption goods. The main advantage of a uniform tax is its simplicity. According to the theory, the optimal sales tax rate for different products should vary with the ease that retailers and consumers have in avoiding the taxes, since these variations will be reflected in the effective rates.

A basic rule in the theory of optimal taxation of consumption proposes that the tax should take into account the fact that the demand for certain goods is more sensitive to price variations than others.[6] In the case of online commerce, products should be taxed at a preferential rate if the sensitivity of demand to price variations for online commerce is higher than the sensitivity of demand for goods purchased in store.

The theoretical logic is that if this condition is verified, then a tax on online purchases will have a more dissuasive effect than the same tax applied to products in physical stores. A lower tax on

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[4] See Canada Revenue Agency, *General Information for GST/HST Registrants*, March 2013. For transactions using a consumer credit card, the only information transmitted to the credit card company during the transaction are the card number, the name of the consumer, the amount of the transaction, and the name of the merchant; Evolve Systems, “Level 1, 2, and 3 credit card processing,” pp. 1-2.

[5] This section is based on a recent research article, and draws heavily from it both in terms of content and formulation. See David R. Agrawal and William F. Fox, *Sales Taxes in an E-Commerce Generation*, Department of Economics and Martin School of Public Policy, University of Kentucky, August 1st, 2015, pp. 14-15. The merits of this explanation are attributable to these authors; all errors that may remain are our own.

[6] Frank P. Ramsey, “A Contribution to the Theory of Taxation,” *The Economic Journal*, Vol. 37, No. 145, March 1927, p. 56.

online commerce is therefore necessary for the two types of commerce to be influenced the same way by taxes.

We recognize, however, that at the present time, no studies exist establishing this higher sensitivity. A recent study estimates that this “price elasticity” of demand for most goods purchased online is 1.5 points higher than that observed in brick-and-mortar stores, and 4.3 points higher when it comes to the demand for electronic goods.[7] Nonetheless, this comparison is affected by the substitution effect between online retailers and can therefore not be directly used to determine the optimal tax rate for online products.

Conversely, we can imagine a theory that proposes that online purchases be more heavily taxed. It is based on the fact that it is impossible to tax leisure directly, since it is made up of activities that escape the logic of production and consumption.[8] Generally speaking, a uniform tax on all goods, apart from leisure, reduces the relative price of leisure compared to other goods, leading to an inefficient and inordinate consumption of leisure. Given this observation, an acceptable compromise would be to tax goods that resemble and are related to leisure at a higher rate. According to this approach, taxing online commerce at a preferential rate could only be justified under the assumption that purchases made online are less related to leisure than purchases made in brick-and-mortar stores. This condition has little chance of being verified in reality.

Similarly, a large prior study concludes that it is better to have uniform taxation of goods purchased online and those purchased in physical stores, for reasons of equity.[9]

[7] Liran Einav *et al.*, “Sales Taxes and Internet Commerce,” *American Economic Review*, Vol. 104, No. 1, 2014, p. 12.
[8] Joel Slemrod, “Optimal Taxation and Optimal Tax Systems,” *Journal of Economic Perspectives*, Vol. 4, No. 1, 1990, p. 159.
[9] George R. Zodrow, “Optimal Commodity Taxation of Traditional and Electronic Commerce,” *National Tax Journal*, Vol. 59, No. 1, March 2006, pp. 7-31.