Online Appendix: Retailers, Importing and Exchange Rate Dynamics: Firm-Level Evidence from Canada*

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1 Introduction

This appendix provides derivations and results that have been omitted from the paper for brevity.

2 Theoretical Derivations

2.1 Trade Participation Cut-offs

Under CES demand and monopolistic competition, the firm-level sales and profit functions are given by the following equations:

$$p_n(\varphi, d_n^w)q_n(\varphi, d_n^w) = \bar{P}^{\sigma-1}\left(\frac{(1+d_n^w a)\tau_n}{\rho\varphi}\right)^{1-\sigma}, \tag{1}$$

$$\pi_n(\varphi, d_n^w) = \frac{p_n(\varphi, d_n^w)q_n(\varphi, d_n^w)}{\sigma} - f(d_n^w\eta_n^w + (1-d_n^w)\eta_n), \tag{2}$$

where $\bar{P} = \left(P^{1-\sigma} + \tau_B^{1-\sigma}\right)^{1/(1-\sigma)}$ is the CES price index.

Equations (1) and (2) and the operating, indirect-importing, and direct-importing zero-profit conditions imply that the respective cut-offs can be expressed as follows:

$$\pi_0(\varphi_0, 0) = 0 \Longleftrightarrow \varphi_0 = \frac{(\sigma f)^{\frac{1}{\sigma-1}}}{\bar{P}\rho}, \tag{3}$$

$$\pi_n(\varphi_n^w, 1) = 0 \Longleftrightarrow \varphi_n^w = \frac{(\sigma f)^{\frac{1}{\sigma-1}}}{\bar{P}\rho}\tau_n^w\eta_n^{w\,\frac{1}{\sigma-1}}, \tag{4}$$

$$\pi_n(\varphi_n, 1) = \pi_n(\varphi_n, 0) \Longleftrightarrow \varphi_n = \frac{(\sigma f)^{\frac{1}{\sigma-1}}}{\bar{P}\rho}\left(\frac{\eta_n - \eta_n^w}{\tau_n^{1-\sigma} - \tau_n^{w\,1-\sigma}}\right)^{\frac{1}{\sigma-1}}. \tag{5}$$

Using equations (3)–(5), we can express the trade participation cut-offs as a function of the operating cut-off as follows:

$$\varphi_n^w = \varphi_0\tau_n^w\eta_n^{w\,\frac{1}{\sigma-1}}; \quad \varphi_n = \varphi_0\left(\frac{\eta_n - \eta_n^w}{\tau_n^{1-\sigma} - \tau_n^{w\,1-\sigma}}\right)^{\frac{1}{\sigma-1}}. \tag{6}$$

2.2 Firm-Level Profit as a Function of the Operating Cut-off

Note that from equation (2) and the operating zero-profit condition, $\pi_0(\varphi_0, 0) = 0$, it follows that the sales of a firm with the operating cut-off productivity is $p_n(\varphi_0, 0)q_n(\varphi_0, 0) = \sigma f$.

Using this result and equation (1), we can see that:

$$\frac{p_n(\varphi, d_n^w)q_n(\varphi, d_n^w)}{p_n(\varphi_0, 0)q_n(\varphi_0, 0)} = \left(\frac{\varphi}{\varphi_0}\right)^{\sigma-1} ((1 + d_n^w a)\tau_n)^{1-\sigma},$$

$$\implies p_n(\varphi, d_n^w)q_n(\varphi, d_n^w) = \sigma f \left(\frac{\varphi}{\varphi_0}\right)^{\sigma-1} ((1 + d_n^w a)\tau_n)^{1-\sigma}. \tag{7}$$

Substituting equation (7) into equation (2) yields a representation of firm-level profits as a function of the operating cut-off:

$$\pi_n(\varphi, d_n^w) = f\left(\left(\frac{\varphi}{\varphi_0}\right)^{\sigma-1} ((1 + d_n^w a)\tau_n)^{1-\sigma} - d_n^w \eta_n^w - (1 - d_n^w)\eta_n\right). \tag{8}$$

2.3 Mean Retail Profits

Mean profits are defined:

$$\tilde{\pi} = \int_{\varphi_0}^{\infty} \pi_0(\varphi, 0)\tfrac{g(\varphi)}{1-G(\varphi_0)}\partial\varphi + \sum_{n=1}^{N}\left(\int_{\varphi_n^w}^{\varphi_n} \pi_n(\varphi, 1)\tfrac{g(\varphi)}{1-G(\varphi_0)}\partial\varphi + \int_{\varphi_n}^{\infty} \pi_n(\varphi, 0)\tfrac{g(\varphi)}{1-G(\varphi_0)}\partial\varphi\right). \tag{9}$$

In order to rewrite all integrals with an upper limit of ∞, add and subtract $\int_{\varphi_n}^{\infty} \pi_n(\varphi, 1)g(\varphi)/(1-G(\varphi_0))\partial\varphi$ for each country n from equation (9), which yields:

$$\tilde{\pi} = \int_{\varphi_0}^{\infty} \pi_0(\varphi, 0)\tfrac{g(\varphi)}{1-G(\varphi_0)}\partial\varphi + \sum_{n=1}^{N}\left(\int_{\varphi_n^w}^{\infty} \pi_n(\varphi, 1)\tfrac{g(\varphi)}{1-G(\varphi_0)}\partial\varphi + \int_{\varphi_n}^{\infty}(\pi_n(\varphi, 0) - \pi_n(\varphi, 1))\tfrac{g(\varphi)}{1-G(\varphi_0)}\partial\varphi\right). \tag{10}$$

Using the firm-level profit function in equation (8) and the direct-importer cut-off in equation (6), we see that:

$$\pi_n(\varphi, 0) - \pi_n(\varphi, 1) = f(\eta_n - \eta_n^w)\left(\left(\frac{\varphi}{\varphi_n}\right)^{\sigma-1} - 1\right). \tag{11}$$

Combining equations (8), (11), and (10) yields:

$$\tilde{\pi} = fk(\varphi_0) + \sum_{n=1}^{N}\left(\frac{1 - G(\varphi_n^w)}{1 - G(\varphi_0)}\eta_n^w fk(\varphi_n^w) + \frac{1 - G(\varphi_n)}{1 - G(\varphi_0)}(\eta_n - \eta_n^w)fk(\varphi_n)\right), \tag{12}$$

where $k(\varphi) \equiv \left(\frac{\tilde{\varphi}(\varphi)}{\varphi}\right)^{\sigma-1} - 1$, and $\tilde{\varphi}(\varphi) = \left(\frac{1}{1-G(\varphi)}\int_{\varphi}^{\infty} \xi^{\sigma-1} g(\xi)\partial\xi\right)^{1/(\sigma-1)}$.

2.4 Elasticity of the Operating Cut-off With Respect to the Exchange Rate

In order to derive the elasticity $\varepsilon_E^{\varphi_0}$, we start by defining $j(\varphi) = (1 - G(\varphi))k(\varphi)$.[1] The derivatives of the functions $j(\varphi)$ and $k(\varphi)$ are as follows:

$$k^{'}(\varphi) = \frac{k(\varphi)g(\varphi)}{1 - G(\varphi)} - \frac{(\sigma - 1)(k(\varphi) + 1)}{\varphi} \qquad j^{'}(\varphi) = -\frac{1}{\varphi}(\sigma - 1)(k(\varphi) + 1)(1 - G(\varphi)).$$

Given these preliminary results, we note that the free-entry condition can be written $\tilde{\pi}(1 - G(\varphi_0)) = f_e$. Equating this representation of the free-entry to equation (12), multiplied through by $1 - G(\varphi_0)$, yields:

$$fe = fj(\varphi_0) + \sum_{n=1}^{N} \left(\eta_n^w fj(\varphi_n^w) + (\eta_n - \eta_n^w) fj(\varphi_n)\right). \tag{13}$$

An elasticity equation for $\varepsilon_E^{\varphi_0}$ is derived by differentiating both sides of equation (13) with respect to E and rearranging as follows:

$$\varepsilon_E^{\varphi_0} = \frac{\sum_{n=1}^{N} \left(\eta_n^w j^{'}(\varphi_n^w)\varphi_n^w |\varepsilon_E^{\tau_n}| + (\eta_n - \eta_n^w) j^{'}(\varphi_n)\varphi_n |\varepsilon_E^{\tau_n}|\right)}{j^{'}(\varphi_0)\varphi_0 + \sum_{n=1}^{N} \left(\eta_n^w j^{'}(\varphi_n^w)\varphi_n^w + (\eta_n - \eta_n^w) j^{'}(\varphi_n)\varphi_n\right)}. \tag{14}$$

Combining equation (14) with the definition of $j^{'}(\varphi)$ and $k(\varphi)$ yields:

$$\varepsilon_E^{\varphi_0} = \frac{\sum_{n=1}^{N} \left| \varepsilon_E^{\tau_n} \right| \left(\eta_n^w \int_{\varphi_n^w}^{\infty} \left(\frac{\varphi}{\varphi_n^w}\right)^{\sigma-1} g(\varphi)\partial\varphi + (\eta_n - \eta_n^w) \int_{\varphi_n}^{\infty} \left(\frac{\varphi}{\varphi_n}\right)^{\sigma-1} g(\varphi)\partial\varphi \right)}{\int_{\varphi_0}^{\infty} \left(\frac{\varphi}{\varphi_0}\right)^{\sigma-1} g(\varphi)\partial\varphi + \sum_{n=1}^{N} \left(\eta_n^w \int_{\varphi_n^w}^{\infty} \left(\frac{\varphi}{\varphi_n^w}\right)^{\sigma-1} g(\varphi)\partial\varphi + (\eta_n - \eta_n^w) \int_{\varphi_n}^{\infty} \left(\frac{\varphi}{\varphi_n}\right)^{\sigma-1} g(\varphi)\partial\varphi \right)}. \tag{15}$$

Next, we multiply the numerator and denominator of equation (15) by $\sigma f M_0/(1 - G(\varphi_0))$, where M_0 is the mass of domestic varieties. Finally, by making use of the firm-level sales function in equation (7) and aggregating, we can write equation (15):

$$\varepsilon_E^{\varphi_0} = \sum_{n=1}^{N} |\varepsilon_E^{\tau_n}| \frac{P_n Q_n}{PQ}. \tag{16}$$

2.5 Aggregate Retail Sales as a Function of $\bar{M}$, $\bar{\tilde{\varphi}}$, and φ_0

Using the firm-level sales function in equation (7), we can express aggregate sales as:

$$PQ = \sigma f \left(\int_{\varphi_0}^{\infty} \left(\frac{\varphi}{\varphi_0}\right)^{\sigma-1} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi + \sum_{n=1}^{N} \left(\int_{\varphi_n^w}^{\varphi_n} \left(\frac{\varphi}{\varphi_0}\right)^{\sigma-1} {\tau_n^w}^{1-\sigma} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi + \int_{\varphi_n}^{\infty} \left(\frac{\varphi}{\varphi_0}\right)^{\sigma-1} {\tau_n}^{1-\sigma} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi \right) \right). \tag{17}$$

[1] The notation and methodology used in this section follow the approach used in the appendix of Melitz (2003).

Noting that $M_0/(1-G(\varphi_0)) = M_n/(1-G(\varphi_n)) = (M_n + M_n^w)/(1-G(\varphi_n^w)$,[2] and factoring out $\varphi_0^{1-\sigma}$, we can rewrite equation (17) as follows:

$$PQ = \frac{\sigma f}{\varphi_0^{\sigma-1}} \left(\int_{\varphi_0}^{\infty} \varphi^{\sigma-1} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi + \sum_{n=1}^{N} \left(\int_{\varphi_n^w}^{\varphi_n} \varphi^{\sigma-1} {\tau_n^w}^{1-\sigma} \frac{g(\varphi)(M_n+M_n^w)}{1-G(\varphi_n^w)} \partial\varphi + \int_{\varphi_n}^{\infty} \varphi^{\sigma-1} {\tau_n}^{1-\sigma} \frac{g(\varphi)M_n}{1-G(\varphi_n)} \partial\varphi \right) \right). \quad (18)$$

Next we add and subtract the term $(M_n + M_n^w){\tau_n^w}^{1-\sigma} \int_{\varphi_n}^{\infty} \varphi^{\sigma-1} g(\varphi)/(1-G(\varphi_n^w)\partial\varphi$ in equation (18), which yields:

$$PQ = \frac{\sigma f \bar{M}}{\varphi_0^{\sigma-1}} \left\{ \frac{1}{\bar{M}} \left(M_0 \tilde{\varphi}(\varphi_0)^{\sigma-1} + \sum_{n=1}^{N} \left((M_n + M_n^w){\tau_n^w}^{1-\sigma} \tilde{\varphi}(\varphi_n^w)^{\sigma-1} + M_n({\tau_n}^{1-\sigma} - {\tau_n^w}^{1-\sigma}) \tilde{\varphi}(\varphi_n)^{\sigma-1} \right) \right) \right\}. \quad (19)$$

Recognizing that the term in the curly brackets is $\bar{\tilde{\varphi}}^{\sigma-1}$, we can rewrite the aggregate retail sales equation:

$$PQ = \bar{M}(\bar{\tilde{\varphi}}/\varphi_0)^{\sigma-1} \sigma f. \quad (20)$$

2.6 Aggregate Retail Expenditures as a Function of $\bar{P}$, $\bar{M}$, and $\bar{\tilde{\varphi}}$

Under CES demand, aggregate retail expenditures are:

$$PQ = \bar{P}^{\sigma-1} \left\{ \int_{\varphi_0}^{\infty} p_0(\varphi, 0)^{1-\sigma} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi + \sum_{n=1}^{N} \left(\int_{\varphi_n^w}^{\varphi_n} p_n(\varphi, 1)^{1-\sigma} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi + \int_{\varphi_n}^{\infty} p_n(\varphi, 0)^{1-\sigma} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi \right) \right\}. \quad (21)$$

Substituting in the firm-level price under monopolistic competition yields:

$$PQ = (\bar{P}\rho)^{\sigma-1} \left\{ \int_{\varphi_0}^{\infty} \varphi^{\sigma-1} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi + \sum_{n=1}^{N} \left(\int_{\varphi_n^w}^{\varphi_n} \varphi^{\sigma-1} {\tau_n^w}^{1-\sigma} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi + \int_{\varphi_n}^{\infty} \varphi^{\sigma-1} {\tau_n}^{1-\sigma} \frac{g(\varphi)M_0}{1-G(\varphi_0)} \partial\varphi \right) \right\}. \quad (22)$$

From equations (18) and (19) it is clear that the term in curly brackets in equation (22) is $\bar{M}\bar{\tilde{\varphi}}^{\sigma-1}$, which allows us to rewrite this equation as follows:

$$PQ = \bar{M} \left(\bar{P}\bar{\tilde{\varphi}}\rho \right)^{\sigma-1}. \quad (23)$$

2.7 Solving for $\bar{P}$ and $\bar{M}$

Equating the aggregate sales equation in (20) to the aggregate expenditures equation in (23) yields the equilibrium CES price index:

$$\bar{P} = (\sigma f)^{\frac{1}{\sigma-1}} \frac{1}{\rho\varphi_0}. \quad (24)$$

The equilibrium mass of varieties, $\bar{M}$, can be derived directly from the aggregate sales

[2]The first equality follows from the definition of the measure of directly imported varieties: $M_n = M_0(1 - G(\varphi_n)/(1 - G(\varphi_0)$. Further noting that the definition of the measure of indirectly imported varieties is $M_n^w = M_0(G(\varphi_n) - G(\varphi_n^w)/(1 - G(\varphi_0)$, the second equality follows from taking the sum $M_n + M_n^w$ and rearranging.

equation in (20):

$$\bar{M} = \frac{PQ}{\sigma f}\left(\frac{\varphi_0}{\bar{\tilde{\varphi}}}\right)^{\sigma-1}. \tag{25}$$

The household budget constraint implies $PQ = 1 - P_B Q_B$. Substituting this into equation (25) yields:

$$\bar{M} = \frac{1 - P_B Q_B}{\sigma f}\left(\frac{\varphi_0}{\bar{\tilde{\varphi}}}\right)^{\sigma-1} = \frac{1 - \bar{P}^{\sigma-1}\tau_B^{1-\sigma}}{\sigma f}\left(\frac{\varphi_0}{\bar{\tilde{\varphi}}}\right)^{\sigma-1} = \frac{\bar{P}^{1-\sigma} - \tau_B^{1-\sigma}}{(\rho\bar{\tilde{\varphi}})^{\sigma-1}}, \tag{26}$$

where the first equality follows from the definition of CES demand for the cross-border good, and the final equality follows from equation (24).

3 Import Share Derivations from Publicly Available Data

This section explains how we derive figures for the share of imported goods in total Canadian retail sales from publicly available input-output tables from Statistics Canada. We also explain how we separate Canadian retail imports across source countries, including the U.S., China, and the rest of the world (ROW).

3.1 The Share of Imported Goods in Total Canadian Retail Sales

To calculate the share of imported goods in total Canadian retail sales, we apply derivation methods from input-output tables following recommendations made by subject area experts at Statistics Canada. We define the share of imported goods in total Canadian retail sales at time t as the following:

$$\frac{P_{Mt}Q_{Mt}}{P_t Q_t} = \frac{\sum_j P^j_{Mt}Q^j_{Mt}}{\sum_j P^j_t Q^j_t} = \frac{\sum_j P^j_{Mt}Q^j_{Mt}}{\sum_j P^j_{Mt}Q^j_{Mt} + P^j_{Dt}Q^j_{Dt}}, \tag{27}$$

where $P_{Mt}Q_{Mt}$ denotes the total value of imported retail goods, and $P_t Q_t$ denotes the total value of retail goods, each at time t. The middle of this expression shows that these aggregate values are derived by taking the sum across all individual retail products j.

We construct a measure of $P^j_{Mt}Q^j_{Mt}$ for each product j that accords with the definition of "total imports for domestic use" = "imports" – "re-exports" – "travel imports." Each of these inputs is available at the product level based on the Input-Output Commodity Classification (IOCC) from final demand tables. We construct a measure of $P^j_t Q^j_t$ for each good j that is equal to the sum of "total imports for domestic use" ($P^j_{Mt}Q^j_{Mt}$) and "total domestically produced goods for domestic use" ($P^j_{Dt}Q^j_{Dt}$). Our definition of "total domestically produced goods for domestic use" = "output" – "scrap" – "inventory withdrawals" – "exports" – "travel

exports," where estimates of "output" are available from input and output tables, and estimates for the rest of these inputs are available from final demand tables.

For our period of interest, 2002–2012, we rely on four different Statistics Canada tables. For the years 2002–2008, we use final demand table 36-10-0403-01 and input-output table 36-10-0424-01; these tables are consistent with the 1993 System of National Accounts (SNA) and use IOCC 1998 product classification. For the years 2007–2011, we use final demand table 36-10-0418-01 and input-output table 36-10-0417-01; these tables are consistent with the 2008 SNA and use IOCC 2009 product classification. For years after 2011, similar measures are available from supply and use tables, reported under a revision in the system of macroeconomic accounts. Given this significant break in classification, we do not rely on the post-2011 tables, and instead assume that the growth rate in $\frac{P_{Mt}Q_{Mt}}{P_tQ_t}$ over 2011–2012 was equal to its average growth rate from 2002–2011, constructed from the 2002–2008 and 2007–2011 tables.

Our definition of retail products covers a set of core consumer goods and includes finished motor vehicles, gasoline, consumer food products, clothes and accessories, household goods, and personal care goods. A list of these goods, and their respective IOCC codes, is provided in Tables 1–3. Tables 1 and 2 accord with 1998 IOCC classification and cover data available for 2002–2008; Table 3 accords with 2009 IOCC classification and covers data available for 2007–2011. We construct estimates of $\frac{P_{Mt}Q_{Mt}}{P_tQ_t}$ for the years 2002–2012 according to the definition in (27), which takes summations across all of the products in Tables 1–3. Our estimates are reported in Table 4.

According to our estimates, the import share in total retail goods rose from 0.47 to 0.50 from 2002 to 2011, and consistently remained above 0.44 throughout this period. We note that, for the years of overlap between our IOCC 1998 and IOCC 2009 estimates (2007 and 2008), our estimates are very close across the two specifications; this provides some credence to the continuity of our measures of $\frac{P_{Mt}Q_{Mt}}{P_tQ_t}$ over the 2002–2011 period.

3.2 The Share of Imported Goods from the U.S., China, and the Rest of the World

To calculate separate estimates of retail imports from the U.S., China, and the rest of the world, we consider the following expression for the share of imported goods from country n in total Canadian retail sales:

$$\frac{P_{nt}Q_{nt}}{P_tQ_t} = \frac{P_{nt}Q_{nt}}{P_{Mt}Q_{Mt}} \times \frac{P_{Mt}Q_{Mt}}{P_tQ_t}, \tag{28}$$

where $\frac{P_{nt}Q_{nt}}{P_{Mt}Q_{Mt}}$ denotes the share of imports from country n in total retail imports. To calculate these import shares, we turn to annual bilateral import data from UN Comtrade, which are available at the Harmonized Commodity Description and Coding System (HS) 6-digit product

level. We use a concordance table to match IOCC 1998 product groups to HS product groups and focus on the set of HS products that covers the IOCC 1998 retail products reported in Tables 1 and 2. We then derive total imports of these products from the U.S., China, and the rest of the world for the years 2002–2012 and calculate shares in total retail imports. Results are reported in Table 5.

According to our estimates, China's share of total Canadian retail imports roughly doubled between 2002 and 2012, rising from 7.5% to 15.2%. This growth came at the expense of imports from the U.S., the share of which fell from 55.4% to 48.4% over the period. The retail imports share from the rest of the world was relatively stable over the 2002–2012 period, ranging from 36.3% to 38.4%.

Finally, taking the product of these shares with annual estimates of $\frac{P_{Mt}Q_{Mt}}{P_tQ_t}$, we derive values for $\frac{\sum_n P_{nt}Q_{nt}}{P_tQ_t}$, which are reported in the body of the paper.

Reference

Melitz, Marc J. (2003) 'The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity.' *Econometrica* 71(6), 1695–1725

Table 1: Retail Product Groups, IOCC 1998 Classification

	Input-Output Commodity Classification (IOCC) 1998	IOCC Description
Motor vehicles		
	1250	Passenger car tires
	33401	Automobiles, excluding passenger vans
	3373	Motor homes, motorcycles & atvs
	3350	Trucks, road tractors & chassis
	3360	Buses & chassis
	31492	Wheel tractors
	3519	Snowmobiles
	33402	Passenger vans
	3489	Ships, boats & parts, excl. pleasure
	3520	Pleasure boats & sporting craft
Gasoline		
	3950	Motor gasoline
Food		
	0521	Beef, fresh, chilled, frozen
	0522	Pork, fresh, chilled, frozen
	0523	Other meat, fresh, chilled, frozen
	0524	Edible offal, fresh, chilled, frozen
	0540	Cured meat
	0559	Prepared meat products
	0570	Animal fat & lard
	0580	Margarine & shortening
	0590	Sausage casings
	0619	Feeds from animal byproducts
	0650	Poultry, fresh, chilled, frozen
	0679	Fluid milk, processed
	0731	Powder dairy products
	0719	Evaporated & condensed dairy products
	0732	Other dairy products
	0720	Ice cream
	0679	Fluid milk, processed
	0690	Butter
	0700	Cheese
	0740	Mayonnaise, salad dressing & mustard
	0820	Sauces, pickles, etc.
	0800	Soups in airtight containers
	0810	Infant & junior foods, in airtight containers
	02901	Fish & seafood (except animal aquaculture), fresh, chilled
	02902	Animal aquaculture products, fresh, chilled
	0751	Fish & seafood prod. fresh, chilled, frozen
	0752	Other fish & seafood products
	0761	Frozen fruit & juice
	0763	Other fruit products
	1100	Roasted coffee
	1110	Tea
	0770	Fruit & jam in airtight containers
	0790	Vegetables & juice in airtight containers
	1132	Peanut butter
	0762	Other fruit juice
	0841	Mineral water, fruit drinks & ice
	1150	Carbonated soft drinks
	1191	Beer, incl. coolers, bought in stores
	1201	Wine, incl. coolers, bought in stores
	4499	Other alcohols & derivatives
	1161	Distilled alc. beverages, bought in stores
	0830	Vinegar
	1080	Prepared cake & other mixes
	0999	Other confectionery
	0989	Chocolate confectionery
	0951	Other bakery products
	1133	Food & drink powders

Table 2: Retail Product Groups, IOCC 1998 Classification (continued)

Input-Output Commodity Classification (IOCC) 1998		IOCC Description
Food (continued)		
	1136	Dry pasta
	0842	Pasta products, excl. dry pasta
	0920	Breakfast cereal products
	0930	Biscuits
	0890	Pet feeds
	0952	Food snacks
	0960	Cocoa & chocolate
	1071	Maple sugar & syrup
	0979	Nuts
	1010	Sugar
	1072	Other syrup
	1134	Other food products
	1140	Soft drink concentrates
	1239	Other tobacco products
	1220	Cigarettes
Clothes		
	1240	Waterproof footwear
	1400	Footwear, excluding waterproof
	1399	Leather, chamois, composition leather and parings and other waste of leather
	1410	Leather gloves
	1859	Other clothing and accessories, excluding dressed furs and fur apparel
	1430	Luggage, briefcases, etc.
	1440	Handbags, wallets, etc.
	1792	Other textile products
	1800	Hosiery
	1841	Men's and boys' clothing, excluding knitted
	1844	Children's wear, excluding knitted
	1843	Other women's clothing, excluding knitted
	1842	Women's underwear and sleepwear
	1869	Dressed furs
	1880	Fur apparel
Household goods		
	2041	Household furniture
	1730	Tents, sleeping bags, sails, etc.
	1509	Bedding
	2079	Mattresses and other furniture
	2851	Metal kitchen utensils
	2852	Other kitchen utensils
	2991	Household clothes washers and dryers
	2993	Mowers, snowblowers, sprinklers, etc.
	35322	Other small household appliances
	35321	Sewing machines, vacuum cleaners and floor polishers
	3550	Household refrigerators and freezers
	3560	Household cooking equipment, excluding microwave ovens
	3571	Radio, stereo, cassette and CD players and similar equipment, and accessories
	3580	Telephone and related equipment, including fax machines
Personal care		
	2139	Tissue and sanitary paper stock
	4120	Oral care products
	4152	Hair care products
	4151	Cosmetic products
	4153	Other personal care products
	4131	Soaps
	4133	Other cleaning products
	4132	Detergents

Table 3: Retail Product Groups, IOCC 2009 Classification

	Input-Output Commodity Classification (IOCC) 2009	IOCC Description
Motor vehicles		
	MPG326201	Tires
	MPG336111	Passenger cars
	MPG336112	Light-duty trucks, vans and sport utility vehicles
	MPG336202	Motor vehicle bodies and special purpose motor vehicles
	MPG336204	Motor homes, travel trailers and campers
	MPG336601	Ships
	MPG336602	Boats
Gasoline		
	ENE324111	Gasoline
Food		
	MPG111A06	Fruits and tree nuts
	MPG311101	Dog and cat food products
	MPG311202	Margarine and cooking oils
	MPG311203	Breakfast cereal and other cereal products
	MPG311209	Grain and oilseed products, not elsewhere classified
	MPG311301	Sugar and sugar mill by-products
	MPG311302	Chocolate (except confectionery)
	MPG311303	Confectionery products
	MPG311401	Fruit and vegetable juices (fresh, frozen and canned) and frozen fruits
	MPG311402	Preserved fruit and vegetables and frozen foods
	MPG311501	Fluid milk and processed milk products (except frozen)
	MPG311502	Cheese and cheese products
	MPG311503	Other dairy products
	MPG311504	Ice cream and frozen desserts
	MPG311601	Fresh and frozen beef and veal
	MPG311602	Fresh and frozen pork
	MPG311603	Fresh and frozen poultry and fowl
	MPG311604	Fresh and frozen lamb and goat meat
	MPG311605	Processed meat products and animal by-products
	MPG311700	Prepared and packaged seafood products
	MPG311801	Bread and rolls
	MPG311802	Cookies, crackers and baked sweet goods
	MPG311803	Flour mixes, dough and dry pasta
	MPG311901	Snack food products
	MPG311902	Coffee and tea
	MPG311903	Flavouring syrups, seasonings and dressings
	MPG312110	Bottled water, soft drinks and ice
	MPG312120	Beer
	MPG3121A1	Wine and brandy
	MPG3121A2	Distilled liquor
	MPG312202	Tobacco products
Clothes and accessories		
	MPG31B001	Men's and women's clothing
	MPG31B002	Infant and baby clothing
	MPG31B003	Clothing accessories
	MPG31B004	Leather and dressed furs
	MPG31B005	Footwear
	MPG31B006	Suitcases, handbags and other leather and allied products
Household goods		
	MPG31A003	Carpets and rugs
	MPG332A01	Hand tools and cutlery (except precious metal)
	MPG334A01	Televisions and other audio and video equipment
	MPG335201	Small electric appliances
	MPG335202	Major appliances
	MPG337102	Household furniture
	MPG337901	Mattresses and foundations
	MPG337902	Blinds and shades
Personal care		
	MPG322203	Disposable diapers and feminine hygiene products
	MPG322204	Sanitary paper products
	MPG325601	Soaps and cleaning compounds
	MPG325602	Toiletries preparations

Table 4: Import Share of Retail Goods, 2002–2011

	IOCC 1998	IOCC 2009
2002	0.466	.
2003	0.449	.
2004	0.451	.
2005	0.463	.
2006	0.473	.
2007	0.481	0.485
2008	0.493	0.497
2009	.	0.480
2010	.	0.497
2011	.	0.504

Table 5: Shares of Retail Imports Across Source Countries, 2002–2012

	U.S.	China	ROW
2002	0.554	0.075	0.372
2003	0.542	0.081	0.376
2004	0.529	0.096	0.375
2005	0.519	0.113	0.368
2006	0.503	0.126	0.371
2007	0.507	0.130	0.363
2008	0.488	0.139	0.373
2009	0.465	0.151	0.384
2010	0.469	0.147	0.384
2011	0.467	0.149	0.384
2012	0.484	0.152	0.364