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## Research Paper

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# Estimates of Cross-border Shopping, 2006 to 2012

by Patrizia Corbi

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- |                |  |
|----------------|--|
| .              | not available for any reference period   |
| ..             | not available for a specific reference period  |
| ...            | not applicable   |
| 0              | true zero or a value rounded to zero   |
| 0 <sup>s</sup> | value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded |
| P              | preliminary  |
| r              | revised  |
| X              | suppressed to meet the confidentiality requirements of the <i>Statistics Act</i>                                   |
| E              | use with caution   |
| F              | too unreliable to be published   |
| *              | significantly different from reference category ( $p < 0.05$ )   |

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## **Abstract**

This article provides estimates of the value of cross-border shopping by Canadian households in the United States from 2006 to 2012, on an annual and quarterly basis. The study provides detailed values for overnight and same-day spending in the United States, postal and courier imports and motor vehicle imports. Total cross-border expenditures are compared to Canadian retail trade sales, to provide a basis of comparison for the magnitude of these expenditures. The extent to which cross-border spending varies with movements in the Canada/United States exchange rate is also examined.

The cross-border expenditure estimates are derived from the Canadian System of Macroeconomic Accounts (CSMA) and their underlying survey and administrative data sources. The estimates are based on three different scenarios (low, medium and high expenditures), with each scenario based on different statistical assumptions. The low scenario represents the lower-bound estimates for cross-border shopping, while the high scenario corresponds to the upper-bound estimates. The medium expenditure scenario is based on assumptions assumed to be the most plausible. All assumptions reflect professional judgement and build on previous analysis.

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## 1. Introduction

This article presents current-dollar estimates of cross-border shopping (CBS) for the period 2006 to 2012. It defines CBS as the outlays that Canadian households make on goods that are purchased in the United States and then brought back to Canada, as well as goods that are delivered to Canada by post and courier. The value of these cross-border expenditure flows is then compared to total retail spending in the Canadian economy in order to evaluate changes in the intensity of CBS over time. Both annual and seasonally-adjusted quarterly data are reported.

The CBS estimates presented in this article are derived from the Canadian System of Macroeconomic Accounts (CSMA) and their underlying survey and administrative data sources. Using these data, a range of CBS estimates are developed that correspond to different statistical assumptions concerning the extent to which different types of U.S.-based outlays made by Canadian residents, are transported and consumed in Canada, as opposed to consumed in the United States. For instance, different assumptions are used to evaluate the share of same-day travel spending that goes towards goods that Canadian residents bring back to Canada. Similarly, various statistical assumptions are used to evaluate the share of spending on overnight trips on particular categories of goods, such as transportation or spending on recreation and entertainment, which are brought back across the border by Canadian residents. Since there is no consensus on the value of CBS, a range of CBS estimates are reported that correspond to three different scenarios: low, medium and high expenditures. Each scenario is based on a corresponding set of assumptions.

The data reported in this article are intended to inform discussion and analysis of the magnitude of CBS and the extent to which these cross-border expenditures vary with movements in the Canada/United States exchange rate. Since an estimated three-quarter of Canadians live within 100 miles of the United States border<sup>1</sup>, many Canadian residents travel to the United States to purchase goods that can be priced lower, from groceries to gas, especially in periods when the Canadian dollar is high. In June of 2012, the Canadian government increased the value of goods that Canadian residents can bring back into the country duty-free and tax-free for trips of more than one day.<sup>2</sup> This paper uses international travel and trade data to produce seasonally adjusted estimates of the value of CBS as a national aggregate, and evaluates how these expenditures compare to retail spending in Canada. It develops annual and quarterly estimates of CBS from 2006 to 2012; a period during which the quarterly value of the Canadian dollar fluctuated between 0.803USD (in Q1 2009) to 1.033 USD (in Q2 2011).

## 2. Canadian travellers and the exchange rate

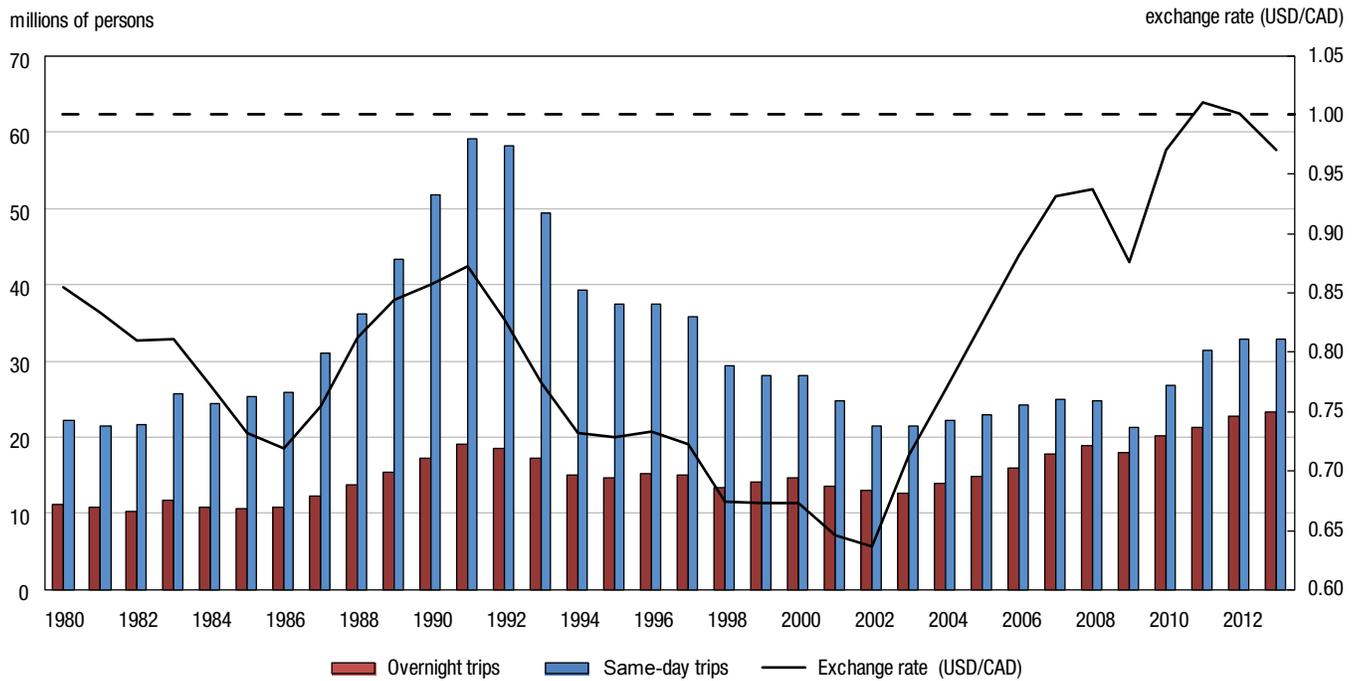
The relationship between the strength of the Canadian dollar and the volume of Canadian travellers to the United States is evolving. From the late 1980s to the early 2000s, travel to the United States and the exchange rate (USD/CAD) closely tracked each other. Chart 1 demonstrates that during these periods, trips to the United States, in particular same-day trips trended with the exchange rate. An appreciation of the Canadian dollar tended to coincide with an increase in the number of persons visiting the United States, while a depreciation in the currency had the opposite effect. However this relationship changed after the early 2000s as trips to the United States were not as responsive to movements in the exchange rate.

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1. National Geographic, Canada Facts, <http://travel.nationalgeographic.com/travel/countries/canada-facts/>. [2014, February].

2. Traveller personal exemption limits increased from \$50 to \$200 for trips over 24 hours, and for trips over 48 hours, the limit increased to \$800 (from the previous limit of \$400 for trips up to a week and \$750 for trips over a week). Exemptions for same-day trips remained unchanged.

**Chart 1**  
**Canadian travellers returning from the United States and the exchange rate**



Source: Statistics Canada, CANSIM Tables 176-0064, 427-0004 and 427-0005.

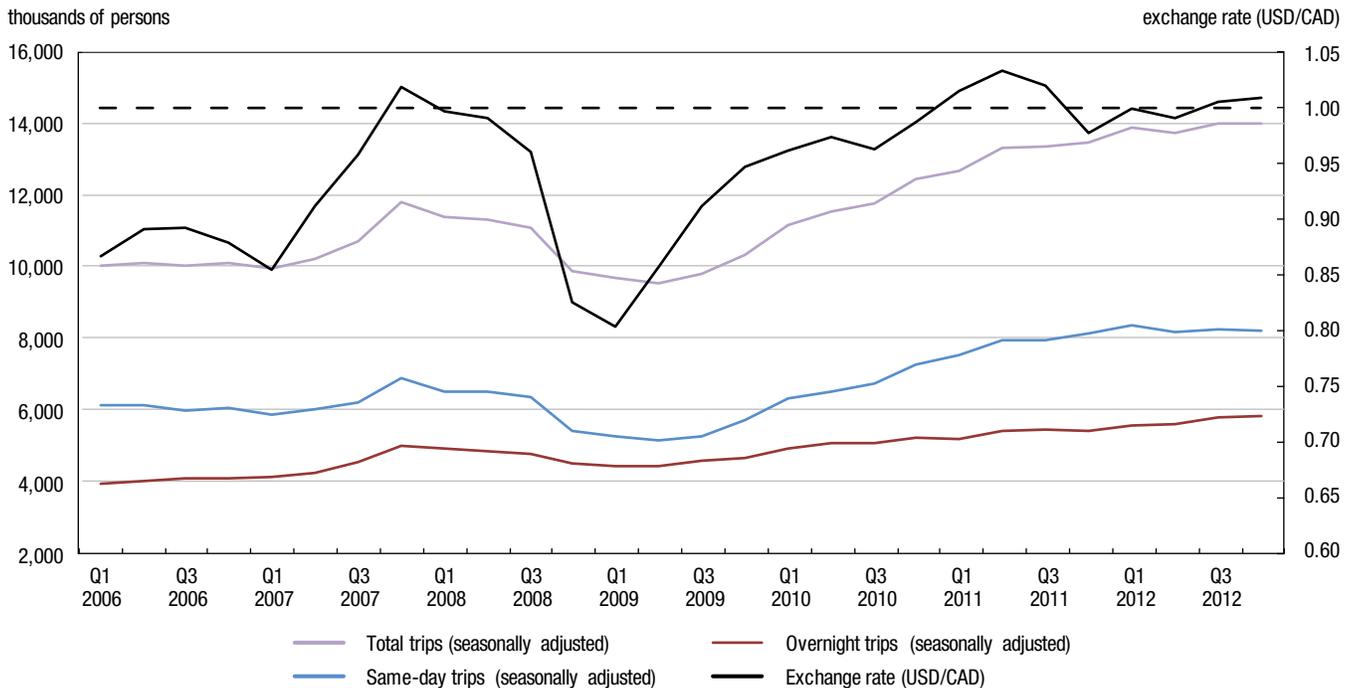
From 2006 to 2012, the annual number of same-day trips by Canadians to the United States has generally increased, notwithstanding the slight decline in 2008 (-0.7%) and the 13.9% decrease in 2009. In 2012, the number of Canadians taking same-day trips to the United States, by all modes of transportation, totalled 32.9 million, an increase of 36% from 2006. Similarly, the number of Canadian travellers visiting the United States on overnight trips trended upwards between 2006 and 2012, reaching 22.7 million in 2012.

Chart 2 plots the exchange rate against total, same-day and overnight Canadian travel to the United States. Prior to the 2008/2009 recession, when the Canadian dollar was high or appreciating in relation to the United States dollar, the number of Canadian visitors to the United States increased. In the last quarter of 2007, the Canadian dollar surpassed parity and Canadian visitors to the United States increased by 10.4% over the previous quarter, on a seasonally adjusted basis. Conversely, the depreciation of the Canadian dollar during the recession coincided with a decline in the number of Canadian travellers to the United States. The total number of Canadians travelling to the United States has trended upwards during the post-recession period between 2010 and 2012, as the Canadian dollar appreciated.

The relationship between the value of the Canadian dollar and the number of travellers is more apparent for same-day travel. Chart 2 illustrates that same-day trips to the United States track general movements in the exchange rate more so than overnight trips. This accords with the view that same-day trips are more often taken for the purpose of shopping.

It should be recognized that the volume of CBS, whether evaluated in terms of the volume of travellers or the monetary value of cross-border purchases, can be influenced by a range of factors, such as price differentials, changes in retailer landscape, duty-free limits, tax changes and economic conditions, in addition to movements in the exchange rate.

**Chart 2**  
**Canadian travellers returning from the United States and the exchange rate**



Source: Statistics Canada, CANSIM Tables 176-0064, 427-0004 and 427-0005.

### 3. Methodology and data sources

To develop estimates of CBS, data are integrated from a range of survey and administrative sources used by the CSMA. Data from several of these sources, such as the International Travel Survey (ITS), are released regularly by Statistics Canada. Other administrative data sources, such as the Register of Imported Vehicles (RIV), are routinely used within the CSMA for estimation, data coherence and quality assurance purposes. The final estimates of CBS are calculated by aggregating the spending on goods purchased in the United States and brought back to Canada, while on same-day and overnight trips, and with data on postal and courier imports and motor vehicles imports.

$$\text{Cross-border shopping} = \text{same-day spending} + \text{overnight spending} + \text{postal and courier imports} + \text{motor vehicle imports}$$

The data used in this analysis originates from several sources. Data from the *International Travel Survey: Mail-back Questionnaires and Air Exit Survey* are used extensively. The ITS covers Canadian residents returning to Canada and American and overseas residents entering Canada, as well as travellers returning directly to selected countries. This analysis uses the spending estimates from the ITS of Canadian residents on trips of one or more nights to the United States along with the spending estimates for same-day trips to the United States. Customs data, adjusted with Canada Post data on the volume of parcels entering Canada, are used to estimate values for goods delivered from abroad to Canada by post and courier. Data derived mainly from the RIV are used to estimate the value of vehicles brought into Canada from the United States by Canadian households. In addition, data from Revenue Canada's *Casual goods accounting document - B15*, are used to validate some of these import data. Retail trade sales data from the *Monthly Retail Trade Survey* are compared to the final estimates of CBS to measure the relative size of the cross-border expenditures in relation to retail spending in Canada.<sup>3</sup>

3. Retail sales were used as a comparison to CBS since the majority of purchases included in CBS would typically be purchased from retail stores. While some of the cross-border spending could also be made from non-store retail, this article does not include the Canadian non-store retail data in the comparison figures because quarterly data are not available. It should be noted that cross-border expenditure amounts are not included as part of Canadian retail sales figures, but non-resident expenditures in Canada are included.

As not all of the expenditures incurred in the United States are and can be transported across borders, this analysis uses a range of statistical assumptions concerning the extent to which these expenditures are on goods consumed in Canada, in order to estimate the value of CBS. The estimates are based on three different scenarios (low, medium and high expenditures), with each scenario being based on different assumptions, that reflect the professional judgement of the subject matter experts and build on previous internal analysis conducted within the CSMA on the value of cross-border expenditures. Statistical bounds are placed around these expenditure estimates using different threshold values and are validated with other data sources when possible. The low expenditure scenario represents the lower-bound estimates for CBS whereas the high expenditure scenario represents the upper-bound estimates for the value of CBS. The medium expenditure scenario is based on assumptions assumed to be the most plausible.

### 3.1 Overnight trips to the United States

The ITS collects information on spending abroad by Canadian residents travelling for business, pleasure and other reasons. For those travellers staying one or more nights in the United States, the total spending data is collected according to five types of spending categories:<sup>4</sup>

- Accommodation<sup>5</sup>
- Transportation – includes gasoline expenditures, car rentals, intercity plane, bus and train fares, local bus and taxi.
- Food and beverage
- Recreation and entertainment<sup>6</sup>
- Other – includes expenses for souvenirs, shopping, photos, etc.<sup>7</sup>

For the categories where no examples are listed, the respondent determines what to include, and estimates are based on the respondent's interpretation. Table 1 reports the different ratios that are used to estimate the portion of U.S.-based expenditures on goods that are brought back to Canada from overnight trips.

**Table 1**  
**Ratios used to estimate the portion of goods that are brought back to Canada from overnight trips**

Scenario	Overnight spending ratios				
	Accommodation	Transportation	Food and beverage	Recreation and entertainment	Other
	percent				
Low expenditure scenario	0	10	5	10	60
Medium expenditure scenario	0	25	10	15	80
High expenditure scenario	2	30	15	20	100

Source: Statistics Canada.

Since the ITS includes spending by households as well as businesses, once the spending estimates are calculated, they are multiplied by a personal expenditure factor for Canadians travelling abroad. By doing so, it is ensured that only the portion that is assumed to be consumed by households (and not businesses) is included. The personal expenditure factor is estimated based on the ITS questions related to the main reason of the trip (business/pleasure/other) and what percentage of these expenditures was paid personally, by business or by government. It is the same factor used in the Canadian economic accounts to allocate part of the imports of travel services to the household final consumption expenditure.

4. In addition, data on spending by Canadians who are travelling through the United States en-route to a different destination are collected and included in the estimates for overnight trips.

5. This category includes expenses for hotels, motels, camping, trailer parks, cabins, cottages and other types of accommodation. While the majority of spending in this category would be on services, respondents may also include spending on goods such as tents and purchases made in hotels, etc.

6. The category recreation and entertainment may include goods such as sports equipment, games, televisions, music and movies etc.

7. This category may also contain other expenses not listed under any of the above headings.

### 3.2 Same-day trips to the United States

The ITS also collects data on Canadians taking same-day trips to the United States. A breakdown of spending by categories is not available. As with overnight trips, the analysis evaluates different assumptions concerning the share of U.S.-based expenditures that are brought back into Canada. These expenditure ratios are presented in Table 2.

**Table 2**  
**Ratios used to estimate of the portion of goods that are brought back to Canada from same-day trips (excluding vehicles)**

Scenario	Same-day spending ratios	
	percent	
Low expenditure scenario	25	
Medium expenditure scenario	50	
High expenditure scenario	75	

Source: Statistics Canada.

Given that the same-day data includes the purchase of motor vehicles, motor vehicle imports are excluded and treated as a separate component. As in the case of overnight spending, a personal expenditure factor is also applied to the same-day spending to obtain estimates for households.

### 3.3 Goods imported by post and courier

In addition to direct spending while travelling in the United States, goods imported into Canada from abroad by post and courier are also added to the estimates of CBS. An adjustment to the data collected is made to account for the duty-exempt and non-taxable postal imports that are not included in the original postal estimates. A personal expenditure ratio is applied, limiting the data to households, and three statistical assumptions are evaluated. Table 3 reports the ratios used. It is important to note that spending on goods purchased from abroad by post and courier also includes foreign (non-U.S.) imports.<sup>8</sup>

**Table 3**  
**Ratios used to estimate personal expenditure on postal and courier imports**

Scenario	Postal imports	Courier imports		Postal imports adjustment
		percent		
Low expenditure scenario	50	20	90	90
Medium expenditure scenario	85	25	100	100
High expenditure scenario	90	50	100	100

Source: Statistics Canada.

### 3.4 Motor vehicles

The value of motor vehicles brought into Canada from the United States by households is obtained from the household final consumption expenditure estimates, in which the data is derived from the RIV and from data extracted from survey and administrative data sources. The RIV database tracks the number of vehicles individuals import into the country by model year, to which an average price is applied. In the most recent years, new vehicle imports are generally made up of more expensive vehicles, so a price above the average Canadian selling price (adjusted for price differentials and exchange rate) is used. For used motor vehicles, values are derived from using the average age and the approximate residual value. These estimates cover purchases of passenger vehicles, trucks, buses, multi-purpose vehicles (MPV), snowmobiles, motorcycles and trailers.<sup>9</sup> Since the value of motor vehicle imports is directly calculated, the estimates are the same for the low, medium and high expenditure scenarios.

8. Estimates include goods that are bought over the internet and delivered by post and courier. Digital goods and services are currently excluded from CBS estimates.

9. For snowmobiles, motorcycles and trailers, only vehicles valued over \$5,000 are reported in CSMA estimates of imported vehicles.

### 3.5 Seasonal adjustment

Once the estimates have been calculated for overnight spending, same-day spending, postal and courier imports and motor vehicle imports for the low, medium and high expenditure scenarios, the quarterly data is subsequently seasonally adjusted using X-12-ARIMA.

## 4. Data overview and results

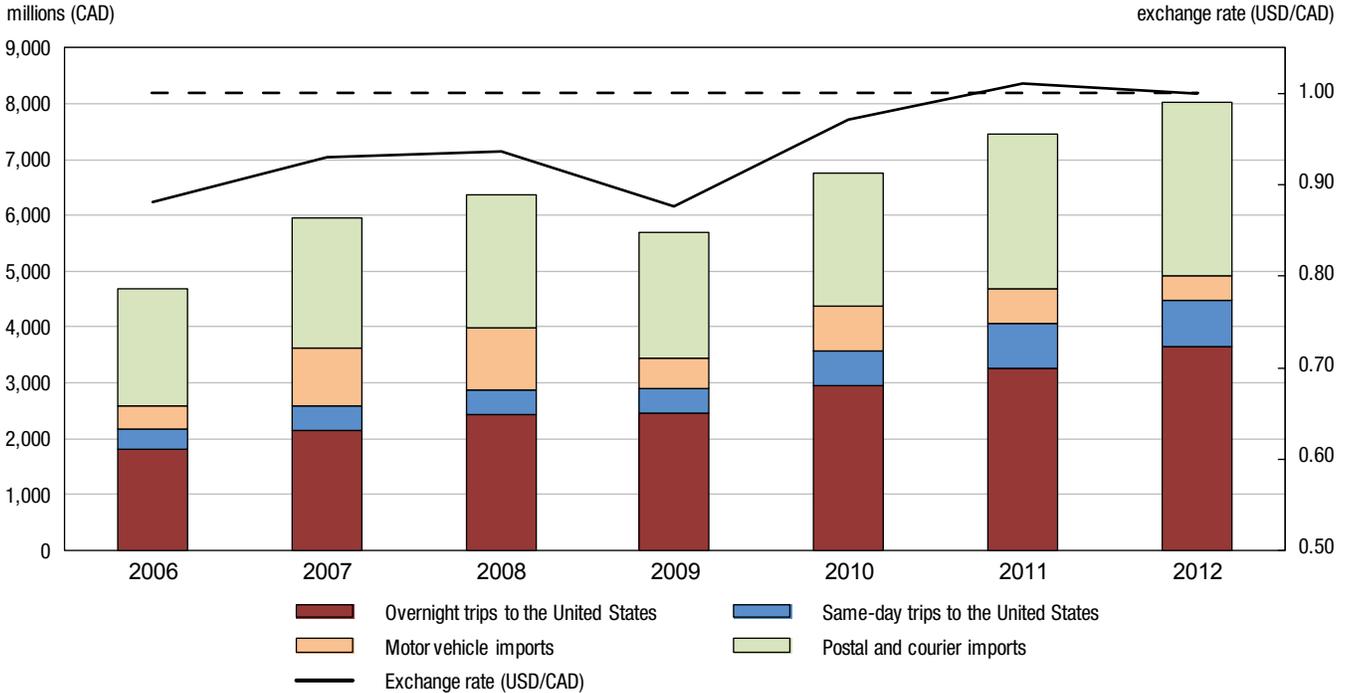
The results based on the medium expenditure assumptions are discussed in this section, whereas the low and high expenditure estimates are presented in the appendix. The medium scenario assumes that Canadians travelling to the United States on overnight trips, for personal reasons, will bring back to Canada, 25% of the value of their transportation spending (which may include items such as tires and gasoline). It assumes that 10% of food and beverage expenditures and 15% of recreation and entertainment expenditures are transported across the border, as those categories are more likely to include services consumed in the United States. The medium scenario also assumes that 80% of the spending in the other category will be brought back to Canada. This is the main category that affects cross-border spending, since this is where travellers report what they spent on shopping and souvenirs. Lastly, 0% of accommodation expenses are assumed to be brought back to Canada. This category is mainly comprised of hotels, motels and other resting places, which are services that cannot be transported.

With regards to same-day trips, the medium scenario assumes that 50% of spending is on goods that are brought back to Canada. For goods imported by post and courier, the medium scenario makes the assumption that the personal expenditure portion of postal imports is 85%, 25% for courier imports, and 100% for the postal imports adjustment that accounts for duty-exempt and non-taxable imports.

The aggregation of these components—overnight and same-day spending, postal and courier imports and motor vehicle imports—provides estimates on total CBS in the United States, from 2006 to 2012. With the exception of 2009, total spending has increased year-over-year, and grew by 7.9% in 2012, to a total value of \$8.0 billion, a 72% increase over the 2006 estimate (Table 4). In comparison, estimates from the low and high statistical assumptions place the total value of CBS for 2012 at \$5.9 billion and \$10.8 billion respectively.

Chart 3 demonstrates that the cross-border spending components detailed above are correlated with the exchange rate. Between 2010 and 2012, when the Canadian dollar approached or surpassed parity, the value of these cross-border expenditures increased by 18.9%, from \$6.8 billion (2010) to \$8.0 billion (2012), for the medium expenditure scenario. Conversely, in 2009 when the Canadian dollar weakened during the recession, the total value of goods purchased in the United States declined by 10.8% over the previous year.

**Chart 3**  
**Cross-border shopping components and the exchange rate**



Source: Statistics Canada, CANSIM Table 176-0064.

Overnight spending and postal and courier imports both account for a large percentage of total cross-border spending, while same-day spending and motor vehicle imports account for significantly smaller portions. In 2012, the percentage contributions towards the total purchase of goods from the United States was 45.3% for overnight trips, 38.9% for postal and courier imports, 10.5% for same-day trips and 5.3% for motor vehicle imports (Chart 3).

**Table 4**  
**Annual estimates of expenditures on goods purchased from the United States and brought back or delivered to Canada, medium expenditure scenario**

Year	Overnight trips to the United States	Same-day trips to the United States	Motor vehicle imports	Postal and courier imports <sup>1</sup>	Total cross-border spending
	millions of dollars				
2006	1,800	370	426	2,082	4,678
2007	2,148	429	1,050	2,326	5,953
2008	2,437	447	1,105	2,392	6,381
2009	2,466	421	560	2,248	5,694
2010	2,949	628	807	2,376	6,760
2011	3,261	794	619	2,775	7,448
2012	3,642	844	422	3,128	8,036

1. Includes purchases from countries other than the United States.

Source: Statistics Canada.

Table 4 illustrates that the value of goods purchased and brought back to Canada from residents taking overnight trips to the United States trended upwards between 2006 and 2012 and more than doubled (102%) in current-dollar terms over the 7 year period. In 2012, the estimated cross-border expenditure from these trips was approximately \$3.6 billion, an 11.7% increase over the previous year. Same-day trip spending has also more than doubled over the analysis period (128%), and grew by 6.3% in 2012 to \$844 million. There was a 5.8% decline in spending on same-day trips in 2009, when the Canadian dollar depreciated 6.5% against the U.S. dollar; however same-day spending increased by 49% the following year, as the Canadian dollar rebounded by 10.8%.

Unlike 2007 and 2008, when the Canadian dollar reached parity and household imports of motor vehicles sharply increased and accounted for a considerable portion of the increase in cross-border purchases, the value of motor vehicle imports has trended downwards in recent years. By 2011/2012, domestic price adjustments by Canadian automotive dealerships on certain motor vehicles models sold in Canada, especially smaller models, made it less advantageous to purchase motor vehicles in the United States, and the composition of imports shifted to more high-end models. Motor vehicle imports were valued at \$422 million in 2012, a decline of 32% from 2011. Postal and courier imports (including non-U.S. imports) increased from 2006 to 2012 and are estimated to be \$3.1 billion in 2012, a 12.7% increase over the previous year and a 50% increase from 2006.

**Table 5**  
**Total cross-border spending and retail trade sales, medium expenditure scenario**

Year	Total cross-border spending	Retail trade sales	Total cross-border spending as a ratio of retail trade sales
	millions of dollars		percent
2006	4,678	389,474	1.2
2007	5,953	412,597	1.4
2008	6,381	427,956	1.5
2009	5,694	415,716	1.4
2010	6,760	438,958	1.5
2011	7,448	456,730	1.6
2012	8,036	468,127	1.7

Source: Statistics Canada, CANSIM table 080-0020.

**Table 6**  
**Comparison of total cross-border spending as a ratio of retail trade sales**

Year	Low expenditure scenario	Medium expenditure scenario	High expenditure scenario
	percent		
2006	0.9	1.2	1.6
2007	1.1	1.4	1.9
2008	1.1	1.5	2.0
2009	1.0	1.4	1.9
2010	1.1	1.5	2.1
2011	1.2	1.6	2.2
2012	1.3	1.7	2.3

Source: Statistics Canada.

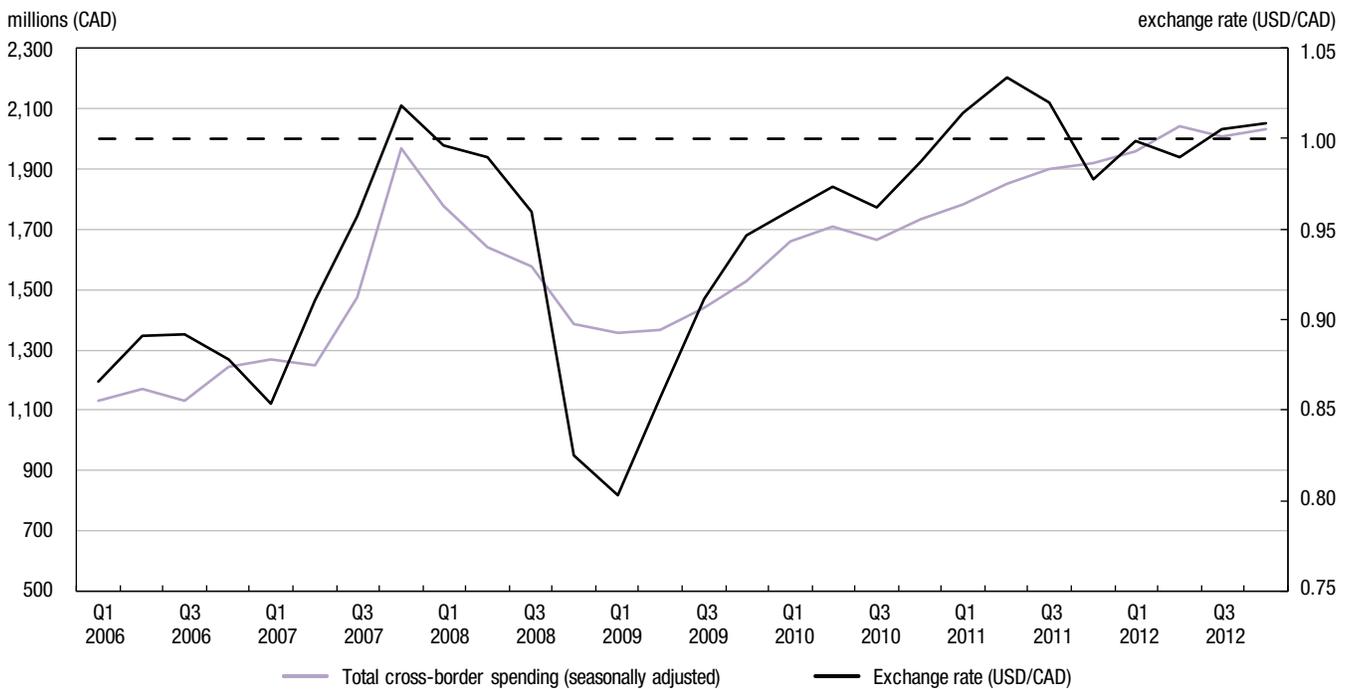
Table 5 presents estimates of CBS for the medium expenditure scenario relative to the total value of Canadian retail sales.<sup>10</sup> This quantifies the value of CBS in relation to total retail spending in the domestic economy. Retail sales in Canada increased 20.2% from 2006 to 2012, notwithstanding the 2.9% decline in 2009. Depending on the year, CBS amounts to approximately 1.2% to 1.7% of domestic retail spending. This ratio has increased over time. In 2012, the total purchases of goods bought in the United States grew by 7.9% while domestic retail trade sales grew by 2.5%. That same year, CBS in the United States accounted for 1.7% of Canada's total retail trade sales.

Table 6 examines the extent to which the ratio of cross-border expenditures to domestic retail trade sales varies across the range of statistical assumptions that this article has examined. For the low expenditure scenario, total CBS as a ratio of retail spending ranges from, 0.9% in 2006 to 1.3% in 2012, while, under the high expenditure scenario, it ranges from 1.6% and 2.3%. Similar to the medium expenditure scenario, these proportions have increased over time, with a slight decrease in 2009.

### 5. Quarterly results

This section uses seasonally adjusted quarterly data to examine the variation in total cross-border spending, along with same-day and overnight spending, from 2006 to 2012. In addition, these quarterly data are used to estimate the intensity of cross-border spending in relation to changes in domestic retail spending.

**Chart 4**  
**Total cross-border spending and the exchange rate**



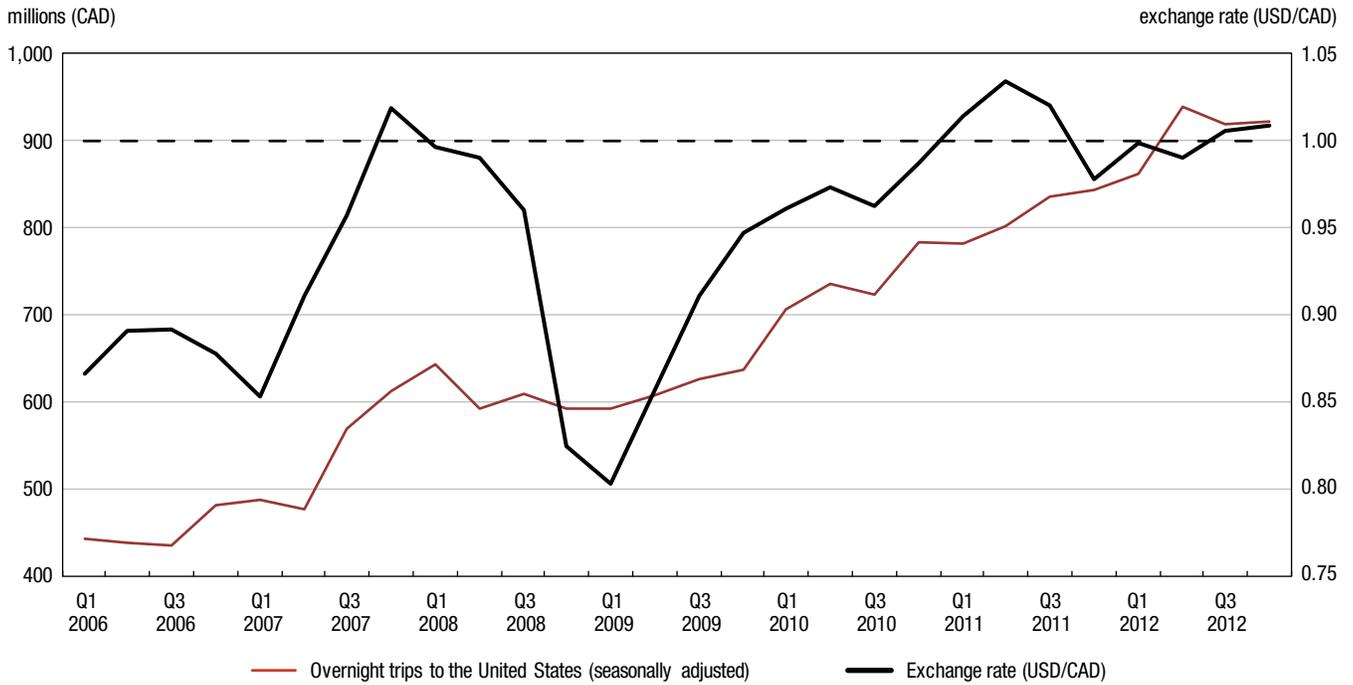
Source: Statistics Canada, CANSIM Table 176-0064.

Chart 4 presents total cross-border spending on a quarterly basis, which increased progressively from late 2009 to 2012. The CBS estimates closely mirror movements in the exchange rate. According to these quarterly data, CBS increased to just under \$2.0 billion in the last quarter of 2007, mainly as a result of the significant increase in motor vehicles purchased from the United States. In the second quarter of 2012, total purchases grew to just over \$2.0 billion. At these points in time, the exchange rate hovered around parity.

10. Retail trade sales estimates include spending from other sectors of the economy (i.e. businesses), whereas the CBS estimates only include household expenditures and are not included as part of the Canadian retail trade sales figures.

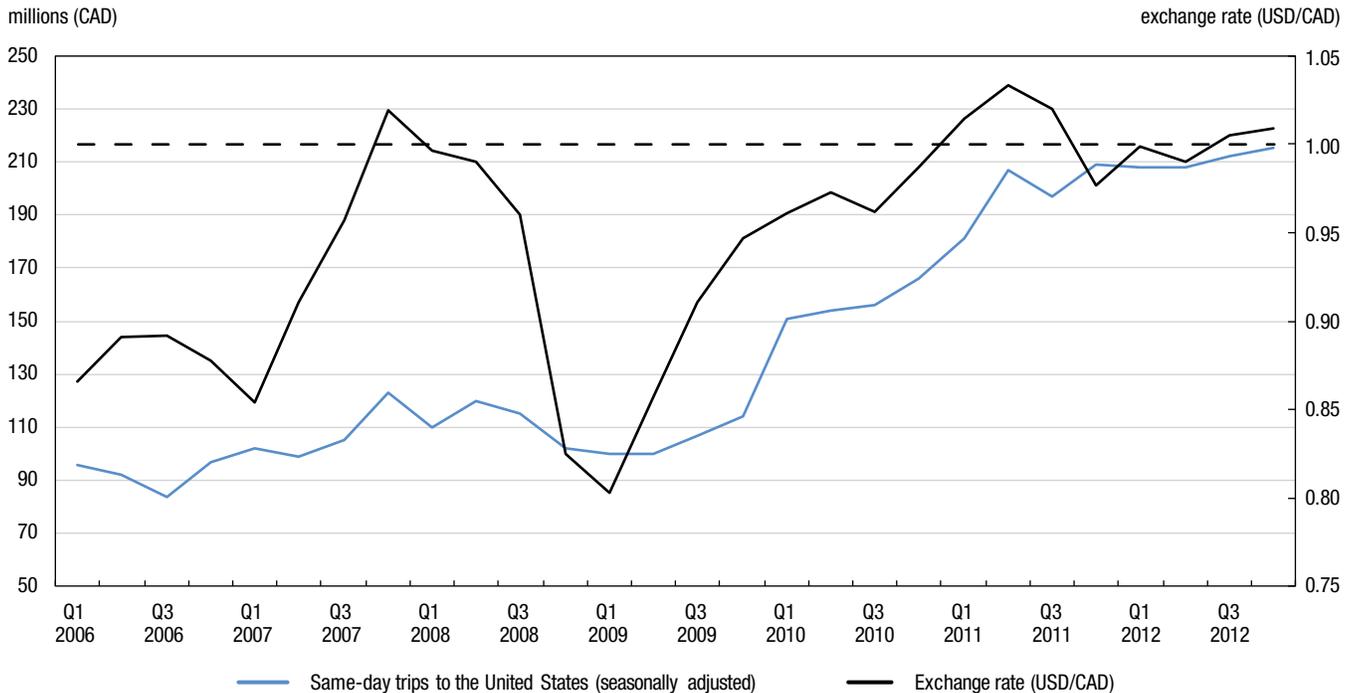
As the Canadian dollar depreciated during the economic downturn at the end of 2008, total purchase of goods from the United States dropped by 12.0% in the last quarter of 2008 and continued to decline until the Canadian dollar began to appreciate again in the second quarter of 2009. The other two sets of statistical assumptions used to produce estimates of CBS yield similar results.

**Chart 5**  
**Overnight spending and the exchange rate**



Source: Statistics Canada, CANSIM Table 176-0064.

**Chart 6**  
**Same-day spending and the exchange rate**



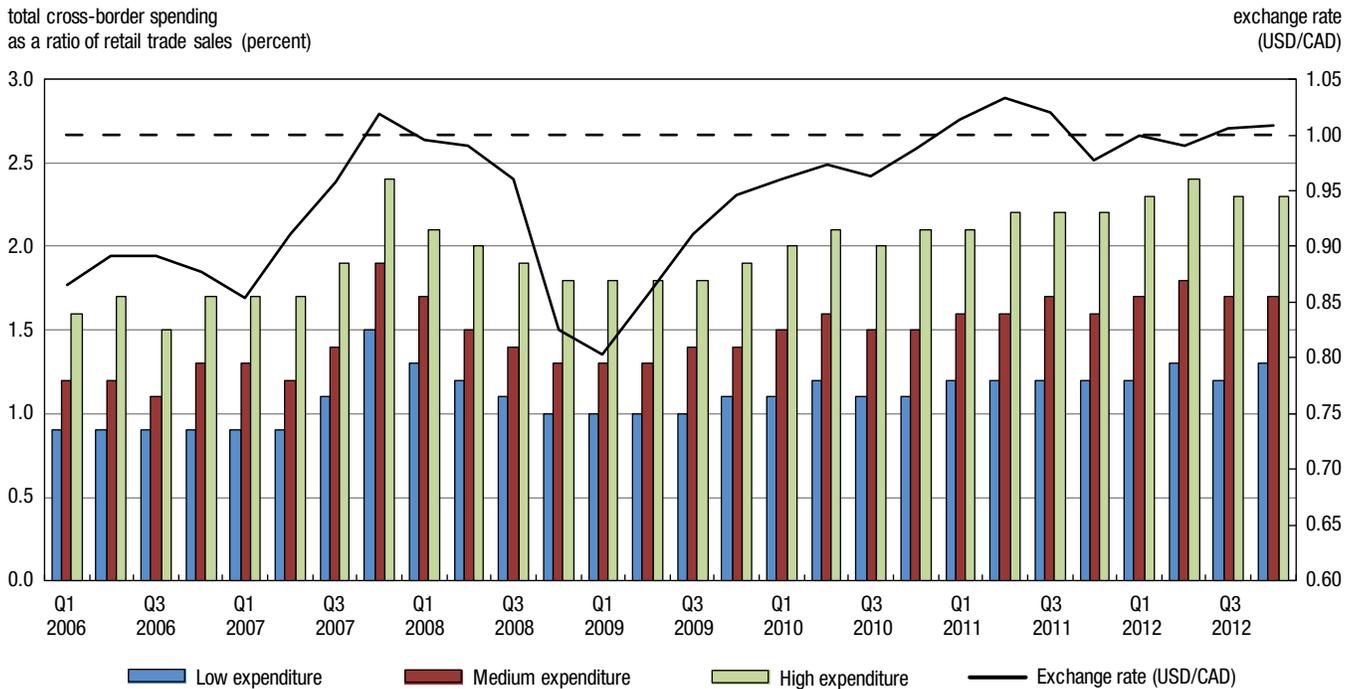
Source: Statistics Canada, CANSIM Table 176-0064.

As previously noted, the expenditure by Canadians during overnight trips to the United States appears to be a significant determinant of total cross-border spending. Chart 5 demonstrates that on a quarterly basis from 2006 to 2012, the estimates for overnight spending are relatively stable and trended upwards over time. Overnight spending in the United States reached its peak of \$939 million in the second quarter of 2012, when the Canadian dollar was just below parity. When the Canadian dollar appreciated significantly in the third quarter of 2007 (5.1%), the amount spent on overnight trips to the United States increased by 19.3%. In the last quarter of 2008, at the start of the recession, overnight spending declined by 3.0%, while the Canadian dollar depreciated by 14.1%.

Chart 6 shows that same-day spending reached its peak in the last quarter of 2012 totalling \$215 million, when the Canadian dollar was just above parity. Same-day spending in the United States varies in accordance with movements in the Canada/United States exchange rate. When the Canadian dollar depreciated towards the end of 2008, to about 82 cents USD, same-day spending declined by 17.1% on a year-over-year basis. During late 2009 to 2011, as the dollar recovered in the post-recession period, same-day spending in the United States steadily increased.

Chart 7 examines total cross-border spending as a ratio of retail trade sales on a quarterly basis for each of the three scenarios. These ratios are quantitatively similar under each set of assumptions, and have increased over time. Under the medium expenditure scenario, quarterly estimates range from 1.1% to a maximum of 1.9%, when compared against domestic retail spending. The low and high expenditure scenario estimates range from 0.9% to 1.5% and from 1.5% to 2.4% respectively.

**Chart 7**  
**Comparison of total cross-border spending as a ratio of retail trade sales; all scenarios**



Source: Statistics Canada, CANSIM Table 176-0064.

## 6. Conclusion

This paper presents annual and quarterly estimates of CBS derived from a range of survey and administrative data sources at Statistics Canada. The 2012 annual estimates for the total expenditure on goods from the United States based on the different statistical assumptions examined are \$5.9 billion, \$8.0 billion, and \$10.8 billion, respectively. The results suggest that CBS amounts to between one and two percent of the value of total retail spending in the domestic economy, depending upon the year and the statistical assumptions examined. The 2012 estimates corresponding to the low, medium and high expenditure scenarios are 1.3%, 1.7% and 2.3% respectively. The data also highlight the extent to which period-to-period changes in the value of CBS mirror recent fluctuations in the Canada/United States exchange rate. These expenditures have generally increased, in both absolute and proportionate terms, with the appreciation of the Canadian dollar in the post recession period to 2012.

## Appendix A. Cross-border shopping data tables

**Table A.1**

**Annual estimates of expenditures on goods purchased from the United States and brought back or delivered to Canada, low expenditure scenario**

Year	Overnight trips to the United States	Same-day trips to the United States	Motor vehicle imports	Postal and courier imports <sup>1</sup>	Total cross-border spending	Retail trade sales	Total cross-border spending as a ratio of retail trade sales
	millions of dollars						percent
2006	1,184	185	426	1,668	3,463	389,474	0.9
2007	1,428	214	1,050	1,868	4,560	412,597	1.1
2008	1,614	223	1,105	1,931	4,872	427,956	1.1
2009	1,642	210	560	1,816	4,228	415,716	1.0
2010	1,970	314	807	1,925	5,015	438,958	1.1
2011	2,171	397	619	2,274	5,460	456,730	1.2
2012	2,434	422	422	2,575	5,853	468,127	1.3

1. Includes purchases from countries other than the United States.

Source: Statistics Canada, CANSIM table 080-0020.

**Table A.2**

**Annual estimates of expenditures on goods purchased from the United States and brought back or delivered to Canada, medium expenditure scenario**

Year	Overnight trips to the United States	Same-day trips to the United States	Motor vehicle imports	Postal and courier imports <sup>1</sup>	Total cross-border spending	Retail trade sales	Total cross-border spending as a ratio of retail trade sales
	millions of dollars						percent
2006	1,800	370	426	2,082	4,678	389,474	1.2
2007	2,148	429	1,050	2,326	5,953	412,597	1.4
2008	2,437	447	1,105	2,392	6,381	427,956	1.5
2009	2,466	421	560	2,248	5,694	415,716	1.4
2010	2,949	628	807	2,376	6,760	438,958	1.5
2011	3,261	794	619	2,775	7,448	456,730	1.6
2012	3,642	844	422	3,128	8,036	468,127	1.7

1. Includes purchases from countries other than the United States.

Source: Statistics Canada, CANSIM table 080-0020.

**Table A.3****Annual estimates of expenditures on goods purchased from the United States and brought back or delivered to Canada, high expenditure scenario**

Year	Overnight trips to the United States	Same-day trips to the United States	Motor vehicle imports	Postal and courier imports <sup>1</sup>	Total cross-border spending	Retail trade sales	Total cross-border spending as a ratio of retail trade sales
	millions of dollars						percent
2006	2,362	554	426	3,065	6,407	389,474	1.6
2007	2,809	643	1,050	3,364	7,866	412,597	1.9
2008	3,186	670	1,105	3,468	8,429	427,956	2.0
2009	3,223	631	560	3,284	7,698	415,716	1.9
2010	3,846	942	807	3,478	9,072	438,958	2.1
2011	4,249	1,191	619	3,960	10,019	456,730	2.2
2012	4,738	1,266	422	4,373	10,799	468,127	2.3

1. Includes purchases from countries other than the United States.

Source: Statistics Canada, CANSIM table 080-0020.

**Table A.4****Comparison of total cross-border spending as a ratio of retail trade sales, all scenarios**

Year	Low expenditure scenario	Medium expenditure scenario	High expenditure scenario
	percent		
2006	0.9	1.2	1.6
2007	1.1	1.4	1.9
2008	1.1	1.5	2.0
2009	1.0	1.4	1.9
2010	1.1	1.5	2.1
2011	1.2	1.6	2.2
2012	1.3	1.7	2.3

Source: Statistics Canada.

**Table A.5**  
**Quarterly estimates of expenditures on goods purchased from the United States and brought back or delivered to Canada, seasonally adjusted at quarterly rates, low expenditure scenario**

Quarter	Overnight trips to the United States	Same-day trips to the United States	Motor vehicle imports	Postal and courier imports <sup>1</sup>	Total cross-border spending	Retail trade sales	Total cross-border spending as a ratio of retail trade sales
	millions of dollars						percent
Q1 2006	290	48	83	409	830	95,364	0.9
Q2 2006	295	46	94	435	871	96,645	0.9
Q3 2006	290	42	111	400	843	98,541	0.9
Q4 2006	309	49	137	424	919	98,925	0.9
Q1 2007	321	51	109	456	937	100,598	0.9
Q2 2007	322	49	122	441	935	103,611	0.9
Q3 2007	384	53	221	463	1,120	103,497	1.1
Q4 2007	400	62	597	509	1,568	104,890	1.5
Q1 2008	424	55	416	490	1,385	106,990	1.3
Q2 2008	397	60	320	488	1,265	108,321	1.2
Q3 2008	409	57	223	509	1,198	108,932	1.1
Q4 2008	383	51	146	443	1,024	103,713	1.0
Q1 2009	394	50	111	446	1,001	101,511	1.0
Q2 2009	409	50	107	445	1,012	103,011	1.0
Q3 2009	422	54	146	452	1,074	105,034	1.0
Q4 2009	417	57	196	471	1,141	106,159	1.1
Q1 2010	469	76	231	461	1,236	109,134	1.1
Q2 2010	495	77	220	483	1,275	108,540	1.2
Q3 2010	486	78	172	496	1,232	109,443	1.1
Q4 2010	520	83	184	485	1,271	111,841	1.1
Q1 2011	520	90	159	540	1,308	112,178	1.2
Q2 2011	535	104	182	538	1,358	113,773	1.2
Q3 2011	556	99	151	586	1,392	114,235	1.2
Q4 2011	560	104	127	610	1,402	116,544	1.2
Q1 2012	573	104	111	637	1,426	116,851	1.2
Q2 2012	625	104	108	647	1,484	116,452	1.3
Q3 2012	617	106	101	636	1,460	117,111	1.2
Q4 2012	619	108	102	655	1,483	117,713	1.3

1. Includes purchases from countries other than the United States.

Source: Statistics Canada, CANSIM table 080-0020.

**Table A.6**  
**Quarterly estimates of expenditures on goods purchased from the United States and brought back or delivered to Canada, seasonally adjusted at quarterly rates, medium expenditure scenario**

Quarter	Overnight trips to the United States	Same-day trips to the United States	Motor vehicle imports	Postal and courier imports <sup>1</sup>	Total cross-border spending	Retail trade sales	Total cross-border spending as a ratio of retail trade sales
	millions of dollars						percent
Q1 2006	443	96	83	511	1,134	95,364	1.2
Q2 2006	439	92	94	544	1,169	96,645	1.2
Q3 2006	436	84	111	499	1,131	98,541	1.1
Q4 2006	482	97	137	528	1,244	98,925	1.3
Q1 2007	488	102	109	568	1,267	100,598	1.3
Q2 2007	477	99	122	550	1,247	103,611	1.2
Q3 2007	569	105	221	576	1,472	103,497	1.4
Q4 2007	613	123	597	632	1,966	104,890	1.9
Q1 2008	643	110	416	609	1,777	106,990	1.7
Q2 2008	592	120	320	605	1,638	108,321	1.5
Q3 2008	610	115	223	630	1,578	108,932	1.4
Q4 2008	592	102	146	548	1,388	103,713	1.3
Q1 2009	593	100	111	554	1,358	101,511	1.3
Q2 2009	608	100	107	552	1,367	103,011	1.3
Q3 2009	627	107	146	560	1,440	105,034	1.4
Q4 2009	638	114	196	582	1,529	106,159	1.4
Q1 2010	706	151	231	570	1,658	109,134	1.5
Q2 2010	735	154	220	597	1,707	108,540	1.6
Q3 2010	723	156	172	612	1,664	109,443	1.5
Q4 2010	784	166	184	597	1,731	111,841	1.5
Q1 2011	782	181	159	660	1,781	112,178	1.6
Q2 2011	802	207	182	657	1,848	113,773	1.6
Q3 2011	835	197	151	715	1,898	114,235	1.7
Q4 2011	843	209	127	743	1,921	116,544	1.6
Q1 2012	861	208	111	776	1,956	116,851	1.7
Q2 2012	939	208	108	787	2,042	116,452	1.8
Q3 2012	919	212	101	772	2,005	117,111	1.7
Q4 2012	922	215	102	793	2,033	117,713	1.7

1. Includes purchases from countries other than the United States.

Source: Statistics Canada, CANSIM table 080-0020.

**Table A.7**  
**Quarterly estimates of expenditures on goods purchased from the United States and brought back or delivered to Canada, seasonally adjusted at quarterly rates, high expenditure scenario**

Quarter	Overnight trips to the United States	Same-day trips to the United States	Motor vehicle imports	Postal and courier imports <sup>1</sup>	Total cross-border spending	Retail trade sales	Total cross-border spending as a ratio of retail trade sales
	millions of dollars						percent
Q1 2006	577	144	83	750	1,555	95,364	1.6
Q2 2006	588	138	94	830	1,650	96,645	1.7
Q3 2006	570	126	111	710	1,517	98,541	1.5
Q4 2006	628	146	137	775	1,686	98,925	1.7
Q1 2007	635	152	109	816	1,713	100,598	1.7
Q2 2007	638	148	122	807	1,715	103,611	1.7
Q3 2007	740	158	221	832	1,952	103,497	1.9
Q4 2007	796	185	597	908	2,486	104,890	2.4
Q1 2008	836	165	416	873	2,290	106,990	2.1
Q2 2008	787	180	320	888	2,175	108,321	2.0
Q3 2008	791	172	223	910	2,096	108,932	1.9
Q4 2008	771	153	146	797	1,868	103,713	1.8
Q1 2009	775	149	111	822	1,857	101,511	1.8
Q2 2009	802	150	107	804	1,863	103,011	1.8
Q3 2009	814	161	146	811	1,931	105,034	1.8
Q4 2009	832	171	196	848	2,047	106,159	1.9
Q1 2010	923	227	231	820	2,200	109,134	2.0
Q2 2010	962	232	220	877	2,291	108,540	2.1
Q3 2010	939	235	172	897	2,243	109,443	2.0
Q4 2010	1,021	249	184	884	2,338	111,841	2.1
Q1 2011	1,019	271	159	948	2,398	112,178	2.1
Q2 2011	1,046	311	182	951	2,489	113,773	2.2
Q3 2011	1,086	296	151	1,015	2,548	114,235	2.2
Q4 2011	1,098	313	127	1,046	2,584	116,544	2.2
Q1 2012	1,122	313	111	1,094	2,639	116,851	2.3
Q2 2012	1,223	312	108	1,104	2,747	116,452	2.4
Q3 2012	1,194	318	101	1,080	2,692	117,111	2.3
Q4 2012	1,199	323	102	1,096	2,720	117,713	2.3

1. Includes purchases from countries other than the United States.

Source: Statistics Canada, CANSIM table 080-0020.

**Table A.8**  
**Comparison of total cross-border spending as a ratio of retail trade sales; all scenarios**

Quarter	Low expenditure scenario	Medium expenditure scenario	High expenditure scenario
	percent		
Q1 2006	0.9	1.2	1.6
Q2 2006	0.9	1.2	1.7
Q3 2006	0.9	1.1	1.5
Q4 2006	0.9	1.3	1.7
Q1 2007	0.9	1.3	1.7
Q2 2007	0.9	1.2	1.7
Q3 2007	1.1	1.4	1.9
Q4 2007	1.5	1.9	2.4
Q1 2008	1.3	1.7	2.1
Q2 2008	1.2	1.5	2.0
Q3 2008	1.1	1.4	1.9
Q4 2008	1.0	1.3	1.8
Q1 2009	1.0	1.3	1.8
Q2 2009	1.0	1.3	1.8
Q3 2009	1.0	1.4	1.8
Q4 2009	1.1	1.4	1.9
Q1 2010	1.1	1.5	2.0
Q2 2010	1.2	1.6	2.1
Q3 2010	1.1	1.5	2.0
Q4 2010	1.1	1.5	2.1
Q1 2011	1.2	1.6	2.1
Q2 2011	1.2	1.6	2.2
Q3 2011	1.2	1.7	2.2
Q4 2011	1.2	1.6	2.2
Q1 2012	1.2	1.7	2.3
Q2 2012	1.3	1.8	2.4
Q3 2012	1.2	1.7	2.3
Q4 2012	1.3	1.7	2.3

Source: Statistics Canada.

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