

# What Factors Affect Canadian Overnight Trips from 2006 to 2016?

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Major Paper presented to the  
Department of Economics of the University of Ottawa  
in partial fulfillment of the requirements of the M.A. Degree Supervisor:  
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Ottawa, Ontario  
August 2018

# Abstract

With data obtained from Statistics Canada, this paper analyzes what factors affect the number of overnight trips from 2006 to 2016. The monthly data in the same years are pooled, and the annual data before and after 2011 are pooled into two large datasets. The results show that Canadians like to travel in summer and those with higher educational attainments and household incomes tend to travel more than others. The increasing number of household members has a negative relationship with the number of trips. Interestingly, Torontonians travel the least among the residents of all metropolitan areas, and residents from the prairie provinces travel more than others. The explanatory power of my model in different periods is around 6% or 7%, so the number of overnight trips may mainly depend on people's different preferences.

# 1. Introduction

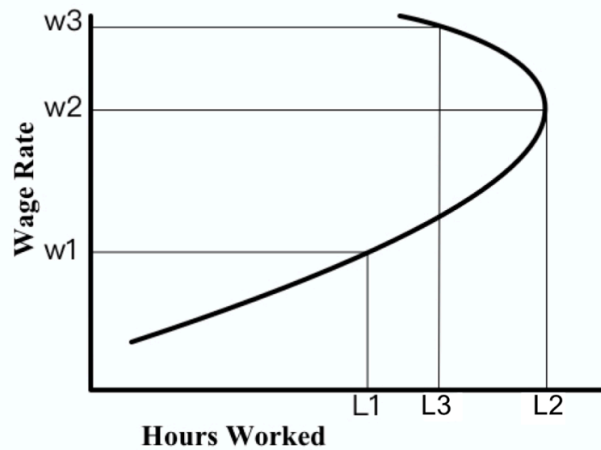
The Canadian government currently promotes its tourism industry. For instance, it marked Canada's 150<sup>th</sup> birthday by granting free admittance to all national parks in 2017. The sustainable development of the tourism industry can benefit a nation's economy and can generate many positive externalities. One question with which I deal is the following: besides abundant tourism resources and well-developed infrastructures, what other factors can affect Canadians' travel decisions? Statistics Canada has conducted the Travel Survey of Residents of Canada (TSRC) every month since 2006 in order to report tourism market conditions. I will use the data from that survey from 2006 to 2016 (11 years) in order to analyze which economic factors affect domestic tourism.

Consumer demand theory has been widely applied to analyze this industry, which means the price of tourism services as well as household income levels play critical roles. In general, people with high incomes are likely to travel more than those with low incomes because it is a normal good. Furthermore, a travel service with lower prices is more competitive than others given the same level of service, despite the fact that consumers' perceptions of the service quality over an entire trip are quite subjective, and that there are plenty of variables that are hard to measure quantitatively that can nevertheless affect their subjective judgment about the quality of the trip. This phenomenon can be explained by the Engels curve of a normal good with a positive gradient, and this relationship is essentially what I am going to estimate. My objective is to analyze the demand side of domestic travel activities with preferences held fixed and focus on the roles of

simple explanatory variables, such as age group and gender, as well as to try to uncover the individual effects of some other explanatory variables, such as personal income and education level.

I agree with the proposition that residents with high incomes and education levels would travel more, all other factors held constant, which means that I would expect residents of metropolitan areas and affluent regions to have a greater number of overnight trips, *ceteris paribus*. This proposition can be analyzed within the labour supply framework. An implication of labour supply theory is that there is a trade-off between work and leisure.

Figure 1. Labour Supply Curve



As Figure 1 shows above, hours worked increases with real wage rate over the range of lower wages, but for wages higher than  $w_2$ , the income effect dominates the substitution effect. I would expect that on average, workers whose wage rate is above that level would choose to travel more. Since wage increases with experience, a tendency that older workers with higher income would travel more than younger workers would be expected. Highly-educated workers with higher skills

are typically more productive than low-educated workers, and earn higher wages, so they would have the means to travel more as well. Furthermore, wealth tends to accumulate over the life cycle, so older residents often have higher wealth levels combined with a lower opportunity cost of time because they are retired. Therefore, on average, I would expect them to take more overnight trips.

The number of the overnight trips is the dependent variable of my model, and the reason why I only take overnight trip numbers into account rather than the total trip numbers from the dataset is that I think same-day trips can be hard to define. There are three groups of exogenous variables including geographic, demographic, and household related that I am interested in. The TSRC classifies a same-day trip as a trip that left and returned home on the same day with a destination of at least 40 kilometers away; however, for a large number of residents who live in metropolitan areas, a trip of 40 kilometers could reflect a commute. Furthermore, it is likely to be reported with error. All trips that are recorded by the TSRC are for tourism reasons only. Since the survey is conducted every month, I am going to pool the data of all 12 months in a same year together, and then apply Ordinary Least Squares (OLS) to a regression equation that includes the variables pertaining to geography, demographics, relative Consumer Price Index (CPI), and households, as well as the endogenous variables (that is, the number of overnight trips) to analyze the significance levels and magnitudes of their effects. For each year of data, there are nearly 90 thousand observations for which the unit is the individual. I will also use multi-variate analysis to assess the individual effects of the explanatory variables, holding the values of the other regressors fixed.

The estimates are interpreted, for example, as the impact of education independent of the impact of income, and vice versa.

The results of my analysis are varied. Some results are consistent with what I expected and some of them are not. As I expected, summer is the season that most Canadians choose to travel domestically, and respondents with higher educational attainments and household incomes tend to travel more than others. The number of household members (i.e. household size) has a negative relationship with the number of trips. One unexpected result is that the residents of large cities tend to travel domestically less often than others, especially Torontonians. Additionally, residents of the six provinces located in Eastern Canada travel less often than those of the other provinces, except British Columbia.

The rest of this paper is structured as follows: section 2 contains the literature review that covers the relevant applications involving demand theory, tourism economics, and labour economics. This is followed by the description of the data, the explanations of some restrictions that I impose, and the presentation of descriptive statistics in section 3. Section 4 gives my econometric model and along with my findings in section 5. The final part is the conclusion in section 6, in which I will summarize the important factors that affect the number of trips and discuss my paper's limitations.

## 2. Literature review

A rather old study of Chadee and Mieczkowski (1987) gives an empirical analysis of the impact of the exchange rate on Canadian tourism, with an eye on helping Canada to improve its

balance of payments in the international tourism industry by drawing more tourists from the USA. Based on neoclassical economic theory, the demand for tourism is mainly determined by the price of tourism services, the price of substitutes, travelers' incomes, and other factors such as exchange rate, which in turn affects the price of international travel. Based on ten years of quarterly data, they used econometric models that were estimated by OLS in order to analyze the change in U.S.-based clients' demand for Canadian travel services and total real expenditure per U.S. visitor in Canada from 1976 to 1985.<sup>1</sup> The explanatory variables included the real exchange rate combined with the nominal exchange rate, the size of the U.S. population, and seasonal factors, all of which are positively related to the number of travelers from the U.S. to Canada, except the seasonal factors. In contrast, the Canada travel price index is negatively related to the quantity demanded. The estimated coefficient of the exchange rate variable is 1.26, which means that a 1% depreciation of the Canadian dollar against the U.S. dollar corresponds to a 1.26% increase in U.S. quantity demanded, and both of the variables are entered as logs, which is consistent with Loeb's (1982) findings. For their expenditure model, all explanatory variables, apart from the size of the U.S. population, have positive relationships with the total real expenditure per U.S. visitor in Canada, but an exchange rate depreciation does not increase the U.S. quantity demanded measured by total expenditure by a noteworthy amount. For every 1 percent depreciation of the Canadian dollar, the expenditure is only increased by 0.52%, which shows that these travelers are not that sensitive to exchange rate fluctuation.

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<sup>1</sup> The data were obtained from Statistics Canada, *Travel Between Canada and Other Countries* of Statistics Canada, Bank of Canada's *Bank of Canada Review*, U.S. Department of Commerce's *Survey on Current Business*, and U.S. Travel Data Center.

Quayson and Var (1982) develop a tourism demand function for Okanagan, an area in British Columbia. Their motivation was that the tourism demand function for Okanagan should be distinct from the national tourism demand function, since the factors that affect national tourism have different impacts on Okanagan's demand. The conceptual framework that they employ is demand theory. The authors assume that the international demand is mostly from the U.S., and the supply curve is horizontal, which is important for the estimation of price effects. They estimate five regression models for visitors from five different regions and one pooled regression model from 1970 to 1978 annually. The dependent variable of their models is the log of tourism receipts of the region. The independent logged variables are: the level of real disposable income, the rate of exchange of the Canadian dollar measured in U.S. cents per Canadian dollar, real round trip surface travel cost from a designated central location including British Columbia, Alberta, California, Oregon, and Washington state to the Okanagan, and the price index of the five regions, which is used for the five separate regressions. The different real costs from the five regions are mainly a result of various transportation costs. Their main finding is that every one percent increase in the income of the traveler will generate 0.623% more tourism revenue for Okanagan in general.<sup>2</sup> The exchange rate variable does not meaningfully affect travelers' decisions, except for those from Washington state, since a one percent depreciation of the Canadian dollar against the U.S. dollar was estimated to bring 1.574% more revenue to Okanagan from that region. In addition, the

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<sup>2</sup> All of their data were obtained from *The Statistical Abstract of the United States (1974 to 1978)*, *A Guide to Scheduled Carrier Services (North American Edition)*, various publications of *Oil Week*, Statistics Canada Publications, *the BC Visitors Survey 1974*, *BC Residential Survey 1976*, and *Okanagan Tourism Facts Book 1977*.

travelers are price sensitive. A one percent rise in prices in Okanagan leads to a 2.118% decrease in revenue, while the surface travel cost does not have any effect, since its coefficient is not significant at the 5% probability level.

Gray (1966) analyzes the demand for international travel by United States and Canada and divides it into two types for the two countries: Canadian imports (outflows of travelers) from the U.S. and from the rest of the world, and U.S. imports from Canada and from the rest of the world, excluding Mexico. The author proposes that international tourism demand is mainly dependent on travelers' tastes and disposable income per capita. Since the tastes only vary over long periods, he focuses on the influence of income on the imports in the form of international tourism based on consumer theory. He analyzes the U.S. and Canada separately from the rest of the World because international travelers are more likely to visit multiple countries during one trip when they travel outside of the U.S. and Canada, so an increased price level in one destination country will not cause them to change their entire travel plan. The countries are substitutes in this instance. Price effects have impacts through changes in the duration of travel. With data that are obtained from the United States Department of Commerce and the Statistics Canada, he finds that Canadians who travel to the rest of the world are sensitive to variations in both the income and exchange rate, while transportation costs do not have significant influence because the cost of transportation has decreased significantly since World War II. Visitors from Canada and the United States who travel to the other country have similar elasticities in response to changes in income, although Canadian

travelers are not as elastic as U.S. travelers with respect to exchange rate fluctuation. U.S. tourism imports from the rest of the world are more sensitive to income changes than is the case for Canada.

It is also important to examine the Australian tourism market because Australia has many characteristics that are similar to Canada, such as culture, economic development level, and abundant natural resources. Allen and Yap (2009) model Australian domestic tourism demand using a panel data approach with the technique of Three-Stage Least Squares. They have quarterly data for seven Australian states from 1999 to 2007 which are abstracted from *Travel by Australians*, a publication of Tourism Research Australia, and the Australian Bureau of Statistics. From 2000 to 2006, the average annual growth rate of the Gross Domestic Product (GDP) of Australia per capita was 5.6%, which is very strong, and the growth of real disposable income per capita was 2.3%. Between 2004 and 2007, the number of domestic travelers decreased by 1.14%, 2.93%, and 0.34% respectively, compared with the number of Australians who travelled overseas, which increased by 19.54%, 16.62%, and 5.31% respectively.<sup>3</sup> This shows that overseas travel was very income sensitive. Applying the theory again, the demand for domestic tourism is affected by domestic household income, tourism prices, transportation costs, the price of overseas holidays, seasonality, and one-off events such as the Sydney Olympic Games in 2000. Domestic tourism activities are divided into three groups, which define the dependent variables: the numbers of visitor nights by holiday-makers, the number of business visitor nights, and number of visitors of friends and relatives. They find that on increase of GDP increases the level of the number of

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<sup>3</sup> The reason why the researchers tended to not pay much attention to the travelers' information before 2004 is because the September 11, 2001 terrorist attack and the global outbreak of the SARS virus in 2003 seriously disrupted the tourism markets.

business visitor nights, since its estimated coefficients are 1.536, and 5.885 for the GDP lagged one-quarter. The levels of the tourism price index, which are lagged one and two quarters, have strong negative relationships with the three dependent variables, which can weaken the domestic tourism market. The coefficients of seasonality on the relationship with the numbers of visitor nights by holiday-makers and the number of visitors of friends and relatives indicate that more domestic travel occurs during holiday seasons such as January to March.

Witt, Newbould, and Watkins (1992) analyze which forecasting techniques are accurate for domestic tourism demand of Las Vegas. They focus on forecasting the domestic tourism demand rather than international tourism demand of Las Vegas because the international demand is highly volatile and hard to measure. The fluctuation of exchange rates, the economic conditions in other countries, political and environmental events, and other factors can have a significant impact on the international demand, while domestic demand is more stable and much less affected by these influences. It certainly is easier to model. Additionally, while tourism is the major industry in the city, international visitors only contribute about ten percent of the total number of visitors.

They use the method of mean absolute percentage error (MAPE) for evaluating and comparing the results of seven forecasting techniques: 'Naive 1', 'Naive 2', exponential smoothing, Gompertz, trend curve analysis, autoregression, and multi-variate econometrics. 'Naive 1' forecasts the value of a given month in year  $t + 1$  by the actual number of visits in the corresponding month in year  $t$ , and 'Naive 2' forecasts the value of a given month in year  $t + 1$  as equal to the actual number of visits in the corresponding month in year  $t$  multiplied by the growth rate over the previous 12-

month period by the naive method.<sup>4</sup> They analyze these three techniques for domestic tourism forecasting with the monthly data that are obtained from various issues of the *Marketing Bulletin* and the 1990 *Ten Year Summary*, published by the Las Vegas Convention and Visitors Authority from 1973 to 1989. According to the accuracy criterion of the MAPE, exponential smoothing is the most accurate technique, and 'Naive 1' performs better than 'Naive 2' for all of the data. Econometric techniques have the same performance with 'Naive 2'. As for monthly forecasting, exponential smoothing performs the worst in July and best in November, but it performs the best for seven months' analyses. 'Naive 1' and 'Naive 2' only perform best for one- and four-months windows analyses. Exponential smoothing is the most accurate forecasting technique among all of the techniques.

For the purpose of analyzing the demand of domestic tourism by Swedish households, Coenen and Van Eekeren (2003) use a two-staged budgeting model based on demand theory and express how some factors affect the demand through elasticities. Trips for business purposes are excluded from their analysis, since they assume the expenditures of these trips are paid by companies instead of individuals, and therefore there is a different underlying determination. All trips must last for at least one night, which excludes same-day trips as well. The first stage of their analysis consists of determining the amount of money that Swedish households would spend on tourism, since they believe that the first planning step is to determine their budgets. Given this choice, tourism expenditures are divided into different groups, such as accommodation and transportation in the

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<sup>4</sup> A similar paper by Martin and Witt (1989) assert that the top three accurate techniques utilized for international tourism forecasting are 'Naive 1', 'Naive 2', and exponential smoothing.

second stage. In their data, which are extracted from the Tourism and Travel Database of Sweden, households that did not take a trip, which have any member who is older than 65 years old or a child older than 20, and who spent their nights mainly on a boat, ferry, car, train, school, or barrack room during the trips were excluded. Only households who travelled by car, train, bus or airplane were taken into account, as these transportation modes were taken by 96% of travelers. According to their results, there is a negative price elasticity of 1.349 for domestic tourism demand, which means that every percent increase in the tourism price will reduce the total expenditure by 1.349%. Although the average price elasticities for restaurant and accommodation expenditures are -0.452 and -1.526 respectively, the elasticity for expenditure on restaurants is -1.486 for travelers who did not have expenditures on accommodation. The expenditure elasticities for spending on groceries, restaurants, shopping, and transportation do not have obvious differences for the households which did have or did not have accommodations during their trips. The elasticities are 0.915, 0.897, 0.974, 0.698 and 0.947, 0.936, 0.982, 0.721 respectively. In addition, the travel purpose of 83.5% households is visiting relatives, friends, or going to their own cottage, so in these cases there is not much demand for accommodations.

In what remains of this literature review, I briefly survey some recent Canadian literatures dealing with these determining variables. Income and education attainments play crucial roles in tourism demand. Boudarbat, Lemieux, and Riddell (2010) study the trends of human capital returns in Canada from 1980 to 2005. Since some factors such as globalization and technological change increased the demand for more educated workers from the late 1970s, highly educated

workers began to earn higher premiums. They found that the wage differential between the male workers with bachelor's degrees and those who are high school graduates increased from 32% in 1980 to 40% in 2005. The differential is still 8% after they control for differences in work experience, and the wage differentials for non-university post-secondary graduates and postgraduate or professional degree rises by 8% or 6% respectively. As for female workers, the increase in the differential is more modest than with their male counterparts. It rises by 3% for non-university post-secondary graduates and 6% for university postgraduates over this period. In addition, Coulombe and Tremblay (2001) analyze skills, education and Canadian provincial disparities from 1951 to 2001. They use two types of human capital indicators: the percentage of the population aged between 15 and 65 with at least one university degree, and the literacy skills test scores of Canada. They also use the category *nonmovers*, which they define as the individuals who still live in the provinces where they did their last year of high school education. Based on the traditional growth accounting framework, their model shows that both skills and educational attainment are more important than years of schooling, and educational attainment is more important than skills. University attainment has a positive and significant impact on income in different provinces even after controlling for skills. Investment in the education of the *nonmovers* contributes about two-thirds of the human capital accumulation, and the remaining one-third is contributed by interprovincial and international immigration processes.

### 3. Data

My analysis is based on data obtained from the Travel Survey of Residents of Canada (TSRC) between 2006 and 2016. The survey is conducted by Statistics Canada every month, and all respondents are at least 18 years of age and from the ten Canadian provinces. The purpose of this survey is to provide information regarding the Canadian tourism industry. It gathers Canadian travelers' information such as trip destination, duration, origin, family background, and education level, and categorizes them into different groups. Four groups of the variables, including general trip activity, household attributes, geography, and demographic traits, are utilised for my analysis. The survey tries to measure travel volume and expenditure of Canadian travelers and is widely used by the government and public agencies.

I convert the monthly data in the same year to an annual frequency and pool the annual data between 2006 and 2010 and between 2011 and 2016 into two separate datasets to check if there are any differences in the pattern of results. Although the TSRC contained some modifications in 2011, the major part of it remained unchanged, which allows me to analyze the later sample with the same method. The most apparent change that can affect my analysis is that the survey includes eight new census metropolitan areas including Moncton, Kingston, Peterborough, Brantford, Guelph, Barrie, Kelowna, and Abbotsford in 2011, and this causes the proportion of the respondents who are placed in the residual category of "all other areas" to decrease.

The data summary shows that majority of travelers choose to take their trips in the Summer; Winter is the season during which people travel the least. Over half of the respondents live in Quebec and Ontario, and many of them live in Montreal and Toronto. Consistent with the census

of Canada, Prince Edward Island has the lowest proportion of respondents, and there are no cities in the census metropolitan areas within to it. Most of the areas are located in Ontario. The share of respondents who are under 25 years old is less than a half of the shares of any other age group; furthermore, it never accounts for more than 10% of the total sample. Although nearly 15% and 20% of the respondents have less than high school or high school diplomas, respectively, about 40% of the total sample have an annual household income of less than \$50,000. A typical household of respondents consists of two adults and no children.

I impose three restrictions in sampling. The observations without a valid labour force status or valid household income information are dropped, and the respondents who are older than 64 years are also not included in my analysis. The elder respondents are not included because they are very different with respondents in other age groups. They have plenty of time to travel due to low opportunity costs, and they receive pensions and securities from the government once they reach 65 years of age, and their incomes are variable. In addition, their preferences and travel decisions can be different than other age groups, as issues such as mobility problems can strongly affect their travel decisions (Zimmer, Brayley, and Searle 1995). On the other hand, respondents who are between 18 and 24 years old are retained because only the observations with a valid labour force status are left, which means no students are included. The estimation would be imprecise with larger standard errors if these observations were not excluded.

The number of observation numbers in my annual data are quite different. As Table 1 shows, the sizes range between 181,411 and 134,498, except for 2009 and 2010. These two years have

only half of the respondents than the other years (88,042 and 85,772). After I imposed my restrictions on the data, in most years the number of observations ranges from 88,158 to 124,445, and 2009 and 2010 have 61,328 and 59,288 valid observations, respectively. Overall, the sizes of the estimating samples are large enough to obtain reliable results.

Since the survey is conducted every month, I create four dummies to analyze whether there is any seasonal effect on the overnight trip numbers. The months of January, February, and December are included in winter; from March to May are included in spring; from June to August are included in summer; and from September to November are included in fall. Tables 2a and 2b show the distribution of observations across the four seasons. The shares of the four seasons sum to 1.0, and they are very similar and stable from 2006 to 2016. The majority of them have a share around one quarter, while the share for 2011 is obviously different than others. The share for Winter is 0.315 in 2011, which leads to the share of the winter of 2011-16 sample reaching 0.267. As for the summary of the year variables for the samples of 2006-10 and 2011-16, Table 3 shows that the shares reflect the number of observations in one year during the two intervals.

Tables 3a and 3b provide a summary of the variables of the ten provinces of Canada. It is apparent that Ontario and Quebec always have the largest shares among them; almost a quarter of the total respondents are from Ontario, and one-fifth of them are from Quebec. Respondents from Prince Edward Island are the fewest, only contributing about 2.5% of the total during the whole period. According to Statistics Canada's 2016 Census, Prince Edward Island has a population of 142,907, while the populations of Quebec and Ontario are 8,164,361 and 13,448,494, and the total

population of Canada is 35,151,728.<sup>5</sup> This means that 0.41%, 23.22%, and 38.25% of Canadians live in Prince Edward Island, Quebec, and Ontario respectively, which is higher than the proportion of the respondents live in these provinces. The residents of these large provinces are underrepresented, and the results of my analysis could therefore be underestimated without employing weights in my estimation. The other Atlantic provinces, Newfoundland and Labrador, Nova Scotia, and New Brunswick, all have around 5% of the total respondents, but the number for Newfoundland and Labrador is unstable. It has 3.5% of the respondents of the total in 2016 and 7.6% of the respondents of the total in 2012. The shares of Alberta and British Columbia are both around 0.1, and Alberta's share is slightly higher than British Columbia's. This province has a larger population than Alberta, and so it is under presented. The other two prairie provinces, Manitoba and Saskatchewan, have smaller shares than Alberta's but larger shares than the Atlantic provinces.

Besides the province of residence, the TSRC asks about the census metropolitan area as well. There are 26 and 34 census metropolitan areas before and after 2011. These areas include St. Johns, Halifax, Saint John, Saguenay, Quebec City, Sherbrooke, Trois-Rivières, Montreal, Ottawa-Gatineau, Oshawa, Toronto, Hamilton, St. Catharines-Niagara, Kitchener, London, Windsor, Greater Sudbury, Thunder Bay, Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Vancouver, Victoria, and all other areas. Moncton, Kingston, Peterborough, Brantford, Guelph, Barrie, Kelowna, and Abbotsford are added by TSRC since 2011, and they were not included before.

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<sup>5</sup> Statistics Canada. (2018, February 08). Population and Dwelling Count Highlight Tables, 2016 Census. Retrieved July 16, 2018, from <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/pd-pl/Table.cfm?Lang=Eng&T=101&S=50&O=A>

Tables 4a and 4b show that a large number of respondents are from Toronto, Montreal, Vancouver, Winnipeg, and Ottawa-Gatineau, and a small number of respondents are from the newly added areas (the residual category). Respondents from the areas that are not listed on the tables represent 49.25% of the total, which decreases to 43.31% after the additional 8 areas have been added. This shows that the information for nearly half of the respondents' census metropolitan areas is missing. One thing that should be noted is that the number of the areas situated in Ontario increased from 10 to 15 since 2011, so a greater share of the Ontario residents have information on this variable. The standard deviations have the same relationships with the shares of the province's variables. They go up in value as their shares increase.

According to Tables 5a and 5b, respondents who are between 18 to 24 years old only accounted for less than 10% of the total respondents. Although the age range of this group is 3 years less than other groups, it has less than half of the total respondents, and they are under-represented. This can be explained by factors such as the possibility that residents in this age group may not have as much spare time as others, and young folks may not like to answer surveys. It is harder to locate them. Its mean values in 2006-2010 and 2011-2016 are 0.089 and 0.081, respectively. The group with respondents in their thirties has the lowest proportion of the total respondents, except for the group in the twenties. About 20% of the respondents are between 25-34 years old, and the proportion of those in their forties, fifties, and sixties ranges between 21% to 26%.

The summary of respondents' education and income information is provided by Tables 6a, 6b, 7a, and 7b. As for the respondents' educational attainments, it is clear that the majority have some post-secondary or post-secondary certificate or diploma (PS), which accounts for 45% of the total. Only a small number of respondents has less than a high school diploma (LHS), and there is a significant, decreasing trend for this group's share since 2006. The share of this group is 0.159 in 2006, while it is 0.078 in 2016, and it decreases monotonically every year. The same pattern applies to the low-income group, in which the respondents' annual household income that is less than \$50,000 (Ilow); its share decreases from 0.481 in 2006 to 0.346 in 2016. In contrast, 19.28% of the total respondents hold university degrees including a Bachelor's, Master's or PhD degree (BD) in 2006, while the number increases to 30.82% in 2016; this trend is monotonic. The high-income group, in which the respondents' annual household income is \$100,000 and over (Ihigh), exhibits a similar trend. The share of this group increases from 16.03% in 2006 to 30.55% in 2016. The proportions of the respondents who only have a high school graduation diploma (HS) are quite stable at a value of approximately 19.5%. It never fluctuated by more than 1% point over the entire interval. The intermediate low-income group, whose incomes range from \$50,000 to \$75,000 (Imidlow), and the intermediate high-income group, whose incomes range from \$75,000 to \$100,000 (Imidhigh), exhibit different trends. The proportion of the intermediate low-income group decreases from 22.56% in 2006 to 15.62% in 2016, but the proportion of the intermediate high-income group increases from 13.27% to 19.18% over the same period.

Tables 8a, 8b, 9a, and 9b show that the majority of households consist of 2 adults and no children, a category that accounts for about 55% and 63% of the total number of observations from 2006 to 2016. Nearly one-third of all households consist of only one adult, which is positively correlated with the proportion of the childless households. Although the households with one child and two children both account for about 15% of the total, and the number of households with two children is slightly lower than those with one child, and only about 10% of the households have three adults. This suggests that many children choose to leave their family once they reach 18 years of age. About 4% of the households have more than three adults, and about 6% have 3 or 4 children, and these figures are stable over the entire interval. No abnormality in the standard deviations is apparent.

The last but not least, a CPI variable is employed in my model for analyzing the two pooled datasets. The annual CPI of this variable is the relative price of tourism, and it is calculated by the annual CPI of travel services divided by the annual overall CPI. According to Statistics Canada, these two CPIs have been both set to 100 in the base year, 2002.<sup>6</sup> What I did not expect is the overall CPI has increased to 128.4, while the CPI of travel services has decreased to 95.9 in 2016, which implies that the relative price of tourism has declined during the period. In addition, the correlation between the two CPIs are only 0.34, so the price of tourism has a different growth trend with other goods. Therefore, we would expect it has a negative impact on the dependent variable, holding all other factors constant. The relative CPI is always negative during the period, except

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<sup>6</sup> Statistics Canada. (2018, August 25). Add/Remove data - Consumer Price Index, annual average, not seasonally adjusted. Retrieved August 25, 2018, from [https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1810000501&request\\_locale=en](https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1810000501&request_locale=en)

those in 2007, 2008, and 2015. The minimum and maximum values of it appear in 2006 and 2015, which are -3.76% and 1.43%, respectively. These are year-over-year growth rates, and this is sloppy. The trend of a relatively cheaper price of tourism may be partly caused by the falling price of vehicle rentals and declined transportation costs according to Wilton (2004).

## 4. Econometric Model

The econometric model in my paper is based on consumer demand theory. For the purpose of analyzing the number of domestic overnight trips accurately, eight groups of dummy variables are generated to be included in my linear regression equation, such as seasonal factors and indicators for province, census metropolitan area, age group, educational attainment, income category, the number of adults in the household, and the number of children of the respondent's household. Here is the general form of my equation:

$$\begin{aligned}
 OverNT_i = & \beta_0 + \sum_{k=1}^3 \beta_{1k} season_{ik} + \sum_{k=1}^9 \beta_{2k} province_{ik} + \sum_{k=1}^{25} \beta_{3k} CMA_{ik} \\
 & + \sum_{k=1}^4 \beta_{4k} age_{ik} + \beta_5 male_i + \sum_{k=1}^3 \beta_{6k} education_{ik} + \beta_7 unemployed_i \\
 & + \sum_{k=1}^3 \beta_{8k} income_{ik} + \sum_{k=1}^4 \beta_{9k} adults_{ik} + \sum_{k=1}^4 \beta_{10k} children_{ik} + \varepsilon_i
 \end{aligned} \tag{1}$$

where the two dummy variables are:

$male_i = 1$  if the gender of the respondent  $i$  is male; 0 if female

$unemployed_i = 1$  if the labour force status of the respondent  $i$  is unemployed; 0 if

employed

where the eight groups of dummy variables are:

$season_{ik}$  = matrix of 3 dummy variables including summer, fall, and winter; 0 if spring

$province_{ik}$  = matrix of 9 dummy variables including Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Manitoba, Saskatchewan, Alberta, and British Columbia; 0 if Ontario

$CMA_{ik}$  = matrix of 26 dummy variables including St. Johns, Halifax, Saint John, Saguenay, Quebec City, Sherbrooke, Trois-Rivières, Montreal, Ottawa-Gatineau, Oshawa, Hamilton, St. Catharines-Niagara, Kitchener, London, Windsor, Greater Sudbury, Thunder Bay, Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Vancouver, Victoria, and all other areas. Moncton, Kingston, Peterborough, Brantford, Guelph, Barrier, Kelowna, and Abbotsford are included since 2011, which is a matrix of 34 dummy variables; 0 if Toronto

$age_{ik}$  = matrix of 4 dummy variables including twenties (19-24), thirties (25-34), forties (35-44), and sixties (55-64); 0 if fifties (45-54)

$education_{ik}$  = matrix of 4 dummy variables including less than high school diploma, high school diploma only, and university degree (Bachelor's, Master's or PhD); 0 if some post-secondary/Post-secondary with and without certificate or diploma

$income_{ik}$  = matrix of 3 dummy variables including \$50,000 to less than \$75,000, \$75,000 to less than \$100,000, and \$100,000 and over; 0 if less than \$50,000

$adults_{ik}$  = matrix of 4 dummy variables including 1, 3, 4, and 5 or more adults; 0 if 2 adults

$children_{ik}$  = matrix of 4 dummy variables including 1, 2, 3, 4; 0 if 0 children

Since there are 8 groups of variables, the coefficients of  $\beta_{1k}$ ,  $\beta_{2k}$ ,  $\beta_{3k}$ ,  $\beta_{4k}$ ,  $\beta_{6k}$ ,  $\beta_{8k}$ ,  $\beta_{9k}$ , and  $\beta_{10k}$  are vectors whose elements are the coefficients corresponding to each category of a set of binary variables.  $\varepsilon_i$  is the error term, and  $\beta_0$  is the constant. The level of unemployment is a continuous variable. The baseline case of the equation is a female in her fifties who lives with one other adult and no children in Toronto, Ontario and for whom Spring is the reference period. Her educational attainment level is some post-secondary education or post-secondary with a certificate or diploma, and her annual household income is less than \$50,000. For the pooled samples of 2006-2010 and 2011-2016, a CPI variable is been added to the equation:

$$\begin{aligned}
 OverNT_i = & \beta_0 + \beta_1 CPI_i + \sum_{k=1}^3 \beta_{2k} season_{ik} + \sum_{k=1}^9 \beta_{3k} province_{ik} + \sum_{k=1}^{25} \beta_{4k} CMA_{ik} \\
 & + \sum_{k=1}^4 \beta_{5k} age_{ik} + \beta_6 male_i + \sum_{k=1}^3 \beta_{7k} education_{ik} + \beta_8 unemployed_i \\
 & + \sum_{k=1}^3 \beta_{9k} income_{ik} + \sum_{k=1}^4 \beta_{10k} adults_{ik} + \sum_{k=1}^4 \beta_{11k} children_{ik} + \varepsilon_i
 \end{aligned} \tag{2}$$

Each year has a specific value of the CPI within those intervals. The equations are estimated by the Ordinary Least Square (OLS) method based on the data obtained from the TSRC from 2006 to 2016 and an assumption that the elasticity of supply in the domestic tourism market is infinity. The error terms are assumed to be random with zero conditional means. In order to capture nonlinearities in the effects of the income and education variables, interaction terms of these variables have also been generated and included in the estimating equation. There are 12 interaction terms,

including three education variables (which are *LHS*, *HS*, and *BD*) that interacted with three categories of income level, which are labelled *Imidlow*, *Imidhigh*, and *Ihigh*, and unemployment. Since the survey does not give the specific income information about the households and it only shows the income groups to which the households belong, the values for the income variable have not been adjusted by the Consumer Price Index (CPI) for any of these years. There is no doubt that the purchasing power in 2006 was greater than in 2016, and I cannot account for that factor. This is going to cause a slight degree of measurement error with respect to the income variable. Since the data is cross-sectional, the sandwich estimators have been applied to my model to eliminate heteroskedasticity. It adjusts the estimated standard errors such that the t-ratios are valid, and leads to the statistically insignificant of some coefficients.

## 5. Regression Results

According to the results listed at Tables 10a and 10b, the estimated coefficients of the CPI variables are statistically insignificant in the 2006-10 sample, while it is at 1% level of significance in the 2011-16 sample. As expected, the coefficients are both negative, so the quantity demanded of travel would increase as the relative price of tourism decreases. Because the variation of the CPI is very small, and the coefficient of variation of it is only 0.017, the estimated standard errors of the coefficients are very high, which causes the estimates to become imprecise, such as the statistically insignificant coefficients in the 2006-10 sample. In addition, the magnitude of the coefficient is -0.150 and comparatively large among all of the magnitudes in the 2011-16 sample,

and the coefficient is statistically significant at the 1% level, that implies price variables estimate have large effects on the tourism demand.

As for the impact of the seasonal variables, all estimated coefficients of summer variable are positive and statistically significant for each year. Their magnitude is around 0.14, which is much larger than the coefficients for the Fall season. Amelung, Nicholls, and Viner (2007) have a similar finding, which is tourism industries in Canada and the countries of northern Europe benefit in the summer. This may be due to the fact that Canada has a cooler summer than the USA and Mexico, so many people choose to spend their vacations in Canada. Only about everyone likes to take a summer vacation. Besides that, some jobs such as teachers and professors have summer vacations, which can contribute to the number of trips in the Summer. The Fall season only has a statistically significant impact in one year (2007) between 2006 and 2010 because its estimated coefficients are not statistically significant in other years, while it is always statistically significant for each year between 2011 and 2016. Although it has positive effect in these years, the estimated magnitudes are very small. The highest one appears in 2014 with a value of 0.022, and the lowest one appears in 2011 with a value of 0.012. One reason that residents may take more vacations in the fall than in the spring, perhaps because it is the most colorful season in Maple Country and Spring time is very short. As for winter, four estimated coefficients from 2006 to 2016 are statistically significant at the 1% level, and three of them are estimated to have negative effects on the dependent variable of the number of overnight trips. The cold winter is the season during which people travel the least, despite the fact that Winter has the New Year and Christmas holidays.

Many Canadians may choose warm regions such as Florida, Arizona, and the Caribbean as their winter destination, which will not be reflected in the domestic trip numbers. Compared with the annual results, the two pooled results show that all of the seasonal variables have significant effects, albeit the estimated coefficient of Fall season is at the 5% significant level in 2006-10 sample. Summer is still the season that has the greatest impact, with the coefficients of 0.146 and 0.139, and Winter is still the season during which people travel the least, with the coefficients of -0.013 and 0.005. The majority of the standard errors of the estimated coefficients of seasonal variables are around 0.004, while they are smaller at around 0.002 in the pooled results due to greater sample sizes; the smaller number can be due to the large increase in the number of observations.

With regards to the provincial variables, most variables have statistically significant estimated coefficients, and residents of the four Atlantic provinces tend to travel less than their counterparts in other provinces. All four Atlantic provinces have negative coefficients, except for the case of Newfoundland and Labrador, which is statistically insignificant for the 2011-16 sample. The coefficients of Newfoundland and Labrador and Prince Edward Island follow a decreasing trend from 2006 to 2010. In contrast, residents of Saskatchewan seem to like to travel more than other provinces' residents during the whole period, with coefficients of 0.104 and 0.088 in the 2006-10 and 2011-16 samples. Provinces such as Quebec, Alberta, British Columbia, and Ontario (which is my baseline province) do not have statistically significant differences from the others. The coefficients of the three prairie provinces always have a positive impact on the dependent variable, although several of them are statistically insignificant.

As for the impacts of the metropolitan area of residence variables, one finding is that large areas such as Vancouver, Calgary, Ottawa, and Quebec City do not exhibit many differences from other CMAs, and the coefficients for CMA regions vary. One interesting point is that almost all of the variables for the pooled samples of 2006-10 and 2011-16 have positive effects on the trip numbers, and most of their estimated coefficients are significant at the 1% significant level. Only Winnipeg and Vancouver in 2011-16 sample have a negative impact on the trip numbers. Although the residents for large cities tend to exhibit higher values than small cities in general, it is unexpected that Torontonians are those who travel domestically the least among all of the regions. One explanation of this is given by Hritz and Ross (2010). They suggest that residents' needs of sport tourism can be satisfied within large cities, so Torontonians can spend fewer trips on sport tourism than others. There is no obvious trend that the effect of an area is increasing or decreasing during the whole period. Sherbrooke and Sudbury have the greatest impacts for the 2006-10 and 2011-16 pooled samples, and their coefficients are 0.160 and 0.151, respectively. Areas in Quebec have a greater impact on the trip numbers than other areas in general. The coefficients of Saguenay, Quebec City, Sherbrooke, and Trois-Rivières are around two times large as the coefficient of Montreal in both periods. The impacts of the areas in Ontario are various. Kingston, Peterborough, Guelph, Barrie, and Sudbury have relatively large impacts; Kingston, Peterborough, Guelph, and Barrie were added to the model after 2010. These five areas are located near to but not beside Toronto geographically. Since nearly half of the respondents' residence metropolitan areas are not specified, and they are divided into the "all other areas" group, the estimation may not be very

accurate in this part. The coefficients of “all other areas” are always around 0.10 in value and are at the 1% significant level from 2006 to 2016. In addition, these estimated effects are net of provincial effects, which is a more aggregated level of regions.

The coefficients of the age variables show that young folks travel much more than others. The coefficients of respondents in their category for those in their twenties are around 0.10 in value during the whole period, which is several times greater than the coefficients of the other age groups. Since this age group corresponds to the respondents who are in labour force and whose ages are between 18 and 24, it is reasonable that young folks travel more because they do not have high incomes, but they tend to have a lower opportunity cost of time, and they do not have familial responsibilities. Additionally, people in their thirties travel more than those in their forties, fifties, and sixties. Before residents reach their sixties, there is a significant negative relationship between the age variables and the variable of trip numbers. It is noticeable that all the coefficients are positive and significant at the 1% level, which means people in the age group of their fifties travel the least when compared to the others. Since households’ incomes increase with work experience Betcherman and Morissette (1994), these people have higher opportunity costs of time and travel than the younger-age people do. Residents who are in their sixties travel a bit more frequently than those in their fifties. Since the retirement age of the majority of Canadians is 65 years old, and the tourism infrastructure is well-developed in Canada, those in their fifties and sixties have an incentive to allocate their time for working and to accumulate their wealth and enjoy travelling

after they retire. The deterioration of personal health conditions can also be an obstacle to travel for those in their sixties.

According to the gender variable, it is clear that males take fewer trips than females, and all the coefficients are negative for each sample at the 1% level of significance. Females have stronger motivations to travel than males according to Jonsson and Devonish (2007), and they have different preferences in travels (Meng and Uysal, 2008). However, the coefficients are not stable during the whole period. It jumps from -0.039 in 2010 to -0.021 in 2011. As with many coefficients of other variables in the tables, the comparatively larger magnitudes of the coefficients before 2010 may be due to the modifications of the survey, such as the fact that more variables have been added to the model since 2011.

There is a remarkable positive relationship between the educational attainment levels and the trip numbers, and it increases markedly as these levels rise. Residents with bachelor's degrees or above travel the most, and residents holding less than high school diplomas travel the least among all of them. According to Kapsalis, Morissette, and Picot (1999), households in high-income levels tend to have high levels educational attainment. It is reasonable that the education variables have a same-sign effect with the income variables on the number of overnight trips. All of the coefficients of the less than high school and high school variables are negative during the entire period; their coefficients are -0.111 and -0.058 in the 2006-10 period sample and -0.082 and -0.042 in the 2011-16 sample. Residents with high school diplomas travel two times more frequently than those with less than high school degrees. Note that these findings for the education variables are

net of the effects of income. Compared with the others, the coefficients of those holding bachelor's diplomas or higher variables are much larger at 0.123 and 0.081 in the 2006-10 and 2011-16 samples, respectively. Since all of the coefficients of the educational attainment variables are at the 1% significance level, the variables are indispensable for analyzing the variation in the trip numbers. In addition, the level of unemployment always has a negative impact on the numbers of the trips. The coefficients are -0.016 and -0.030 in 2006-10 and 2011-16 samples, respectively. Although unemployment gives people more spare time, this does not lead to more trips being taken since they suffer a major loss in income.

All coefficients of the income variables are positive and statistically significant at the 1% level. The same pattern applies to the education variables; there is an apparently positive relationship between the income level and the number of overnight trips. From the low-income to the high-income groups, the estimated coefficients grow from zero to 0.252 in 2006-10 sample and to 0.172 in 2011-16 sample, which are around three times larger than those of the intermediate low-income group. As I expected, the trip numbers increase with households' incomes. This finding corresponds with the finding of Kim, Cheng, and O'Leary (2007), which is that income levels have a positive relationship with the participation of tourism activities.

The number of adults and children in a household has a clear impact on the numbers of trips. Most of the estimated coefficients are statistically significant at the 1% level. The number of overnight trips apparently declines with the increasing number of adults in a household, as one might expect. For instance, the coefficients drop from about 0.017 to about -0.071 as the number

of adults increases from one to five. That may be because households with fewer members have more spare time and lower costs of travel that give them comparatively greater opportunities to travel. Due to the different preferences of the members, households with more members could be hard to plan a trip that satisfies everyone's preferences. Since the number of observations of households with four and five adults in the dataset is very low, their standard deviations tend to become larger than others'. A similar empirical pattern is found for the number of children in a household as well, but the decreasing trend is not as obvious as is the case with the variable of the number of adults. Many of the estimated coefficients of one-child households are smaller than those with two children. The coefficients of households with four children are -0.055 and -0.038. In general, the more members that a household has, the fewer trips that the household will take, all other factors held constant. All of the number of children variables have negative estimated coefficients, because the baseline case for the equation is households with no children. Households with more children have higher real costs and opportunity costs, which will reduce their discretionary incomes and the amount of spare time that they have available. That interpretation is consistent with the one for income levels.

The effects of the interaction terms are illustrated in Tables 11a and 11b. It is apparent that the majority of the variables of interaction terms are not statistically significant at the 10% level. Only the coefficients of the less than high school diplomas interacted with high income variable, high school degrees interacted with unemployment variable, and bachelor's-or-above degrees and unemployment are statistically significant in both 2006-10 and 2011-16 samples. For the

interaction terms of high education crossed with high income levels or low education crossed with low income levels, most of their coefficients are statistically insignificant at the 10% level.

The last rows of Tables 10a and 10b indicate the explanatory power and the results for statistical tests of my model. The results for the F test show my model is always statistically significant at the 1% level, and about 7.5% and 5.78% of the total variation in the dependent variable is explained by the model during the two estimation intervals. The adjusted  $R^2$ s are approximately same with the unadjusted  $R^2$ s in my model. The decreased explanatory power for the later interval may be due to the addition of the metropolitan area variables in the data since 2011. There are several reasons why the overall explanatory power is low in the model. First, the incomes are not adjusted by CPI due to the lack of specific information on incomes, which is likely to introduce measurement error. Second, autoregression and econometrics modelling are not the most accurate forecasting techniques for domestic tourism demand according to Witt, Newbould, and Watkins (1992). Thirdly, travel decisions may depend mainly on residents' preferences, many of which are unobservable. Residents who share many same characteristics with others could have quite different preferences regarding travel.

The tables in my appendix give statistical tests' results of the model. Tables 1a, 1b, 1c, and 1d show the results of the robustness checks for the pooled 2006-10 and 2011-16 samples. The statistically significant coefficients remain stable under this test, and the explanatory power increases with more variables (especially for income variables) that are added in the equation. The results of the joint significance test of groups of exogenous variables are given in Table 2 in the

appendix, for which the null hypothesis is that the variables in my equation are not determinants of the number of overnight trips. It is obvious that the variables are jointly relevant because all the p-values are zero, except for the interaction terms in some periods.

## 6. Conclusion

I analyze the impacts of the factors from Travel Survey of Residents of Canada on the number of domestic overnight trips from 2006 to 2016, and some of my findings are consistent with my prior expectations. Summer is the season during which most Canadians choose to travel domestically, and it is not surprising that it is during the Winter that overnight trips are at their lowest level. Additionally, the results have proven that respondents with higher educational attainments and household incomes tend to travel more than others. Furthermore, the higher the number of household members, the lower the number of trips. Other conclusions include that males travel less frequently than females, and that unemployment has a negative impact on the number of trips.

There are unexpected findings as well. Residents of large cities travel less domestically than other residents, especially Torontonians. They travel the least among the residents of all other areas, while I had expected that they would travel more because they have higher levels of exposure to multi-culturalism. Residents of the six provinces located in Eastern Canada travel less than those of other provinces, except for British Columbia. I did not expect that, since the majority of tourism attractions are located far away from the prairie provinces, although the median household incomes

of several metropolitan areas rank highly.<sup>7</sup> However, a limitation of my paper is the explanatory power of my model in the two different periods is low, with  $R^2$  value of around 6% or 7%. One explanation for that could be the number of the overnight trips mainly depends on people's particular preferences, which cannot be observed.

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<sup>7</sup> The households' income information is obtained from Statistics Canada (<https://www150.statcan.gc.ca/t1/tb11/en/tv.action?pid=1110001201&pickMembers%5B0%5D=1.1>).

## References

- Allen, D. and G. Yap (2009) 'Modelling Australian Domestic Tourism Demand: A Panel Data Approach.' *School of Accounting, Finance and Economics & FEMARC Working Paper Series No.0910*.
- Amelung, B., S. Nicholls, and D. Viner (2007) 'Implications of Global Climate Change for Tourism Flows and Seasonality.' *Journal of Travel Research*, 45(285).
- Betcherman, G. and R. Morissette (1994) 'Recent Youth Labour Market Experiences in Canada.' Research Paper no. 63, Analytical Studies, Ottawa: Statistics Canada.
- Boudarbat, B., T. Lemieux, and W.C. Riddell (2010) 'The Evolution of Human Capital in Canada, 1985-2005.' *Canadian Public Policy*, 36(1): 63–89.
- Chadee, D., and Z. Mieczkowski (1987) 'An Empirical Analysis of the Effects of the Exchange Rate on Canadian Tourism.' *Journal of Travel Research*, 26(1): 13-17.
- Coenen, M., and L. Van Eekeren (2003). 'A Study of the Demand for Domestic Tourism by Swedish Households using a Two-staged Budgeting Model.' *Scandinavian Journal of Hospitality & Tourism*, 3(2): 114–133.
- Coulombe, S., and J.F. Tremblay (2007) 'Skills, Education and Canadian Provincial Disparity.' *Journal of Regional Science*, 47(5): 965-991.
- Gray, H.P. (1966) 'The Demand for International Travel by the United States and Canada.' *International Economic Review*, 7(1): 83-92.
- Hritz, N., and C. Ross (2010) 'The Perceived Impacts of Sport Tourism: An Urban Host Community Perspective.' *Journal of Sport Management*, 24(2): 119-138.
- Kapsalis, C., R. Morissette, and G. Picot (1999) 'The Return to Education and the Increasing Wage Gap between Young and Older Workers.' *Analytical Studies Branch Research Paper Series*, Statistics Canada No. 11F0019MPE No. 131.

- Kim, H., C. Cheng, and J.T. O'Leary (2007) 'Understanding participation patterns and trends in tourism cultural attractions.' *Tourism Management*, 28: 1366–1371.
- Jonsson, C., and D. Devonish (2007) 'Does Nationality, Gender, and Age Affect Travel Motivation? A Case of Visitors to The Caribbean Island of Barbados.' *Journal of Travel & Tourism Marketing*, 25(3-4): 398-408.
- Loeb, Peter D. (1982) 'International Travel to the United States: An Econometric Evaluation.' *Annals of Tourism Research*, 9(1): 7-20.
- Martin, C. A., and S.F. Witt (1989) 'Accuracy of Econometric Forecasts of Tourism.' *Annals of Tourism Research*, 16: 407-428.
- Meng, F., and M. Uysal (2008) 'Effects of Gender Differences on Perceptions of Destination Attributes, Motivations, and Travel Values: An Examination of a Nature-Based Resort Destination.' *Journal of Sustainable Tourism*, 16(4): 445-466.
- Quayson, J., and T. Var (1982) 'A Tourism Demand Function for the Okanagan, BC.' *Tourism Management*, 3: 108-15.
- Wilton, D (2004) 'Long Term Trends and Cycles in Canadian Tourism.' Tourism Canada No. C86-198/2004E.
- Witt, S.F., G.D. Newbould, and A.J. Watkins (1992) 'Forecasting Domestic Tourism Demand: Application to Las Vegas Arrivals Data.' *Journal of Travel Research*, 31(1): 36–41.
- Zimmer, Z., R. E. Brayley, and M. S. Searle (1995) 'Whether to go and where to go: identification of important influences on seniors' decisions to travel.' *Journal of Travel Research*, 33:3-10.

Table 1: Sample Sizes

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Unrestricted	171319	170600	169166	88042	85772	181411	163201	139180	137192	134498	146637
Restricted	119359	119415	117907	61328	59288	124445	110196	94104	90941	88158	97022

Table 2a: Shares of Seasonal Variables from 2006 to 2010

	2006	2007	2008	2009	2010	2006-2010
Spring	0.247	0.255	0.248	0.252	0.258	0.251 (0.434)
Summer	0.250	0.248	0.247	0.253	0.248	0.249 (0.432)
Fall	0.256	0.242	0.253	0.244	0.240	0.248 (0.432)
Winter	0.248	0.255	0.252	0.251	0.254	0.252 (0.434)

Notes: Standard deviations are in brackets.

Table 2b: Shares of Seasonal Variables from 2011 to 2016

	2011	2012	2013	2014	2015	2016	2011-2016
Spring	0.230	0.250	0.249	0.246	0.250	0.253	0.246 (0.430)
Summer	0.225	0.244	0.239	0.246	0.245	0.242	0.240 (0.427)
Fall	0.230	0.250	0.252	0.253	0.253	0.255	0.248 (0.432)
Winter	0.315	0.256	0.259	0.255	0.252	0.249	0.267 (0.442)

Notes: Standard deviations are in brackets.

Table 3a: Distribution of the Observations across Provinces from 2006 to 2010: Shares

	2006	2007	2008	2009	2010	2006-2010
Newfoundland and Labrador	0.056	0.055	0.056	0.069	0.073	0.060 (0.237)

	2006	2007	2008	2009	2010	2006-2010
Prince Edward Island	0.025	0.025	0.026	0.024	0.025	0.025 (0.156)
Nova Scotia	0.053	0.052	0.052	0.050	0.053	0.052 (0.223)
New Brunswick	0.052	0.051	0.052	0.050	0.052	0.051 (0.221)
Quebec	0.200	0.200	0.198	0.193	0.190	0.197 (0.398)
Ontario	0.275	0.276	0.281	0.272	0.259	0.274 (0.446)
Manitoba	0.067	0.069	0.069	0.081	0.086	0.072 (0.258)
Saskatchewan	0.066	0.066	0.070	0.068	0.068	0.068 (0.251)
Alberta	0.100	0.100	0.098	0.093	0.094	0.098 (0.297)
British Columbia	0.106	0.106	0.100	0.099	0.100	0.103 (0.304)

Notes: Standard deviations are in brackets.

(Continued)

**Table 3b: Distribution of the Observations across Provinces from 2011 to 2016: Shares**

	2011	2012	2013	2014	2015	2016	2011-2016
Newfoundland and Labrador	0.075	0.076	0.037	0.037	0.038	0.035	0.052 (0.222)
Prince Edward Island	0.026	0.026	0.025	0.027	0.026	0.024	0.026 (0.158)
Nova Scotia	0.055	0.054	0.059	0.059	0.057	0.056	0.056 (0.231)
New Brunswick	0.054	0.053	0.052	0.052	0.049	0.051	0.052 (0.222)
Quebec	0.189	0.191	0.202	0.204	0.203	0.200	0.197 (0.398)
Ontario	0.252	0.248	0.253	0.248	0.232	0.246	0.247 (0.431)
Manitoba	0.087	0.091	0.094	0.091	0.100	0.095	0.093 (0.290)
Saskatchewan	0.071	0.072	0.073	0.073	0.079	0.079	0.074 (0.262)
Alberta	0.093	0.094	0.103	0.103	0.107	0.106	0.100 (0.301)
British Columbia	0.098	0.097	0.102	0.105	0.108	0.108	0.103 (0.303)

Notes: Standard deviations are in brackets.

Table 4a: Distribution of the Observations across the CMAs from 2006  
to 2010: Shares

	2006	2007	2008	2009	2010	2006-2010
Allother	0.493	0.489	0.493	0.494	0.496	0.493 (0.500)
StJohns	0.020	0.020	0.021	0.027	0.029	0.022 (0.148)
Halifax	0.023	0.023	0.022	0.023	0.023	0.023 (0.149)
SaintJohn	0.007	0.008	0.007	0.007	0.007	0.007 (0.085)
Saguenay	0.012	0.012	0.011	0.011	0.011	0.012 (0.107)
Quebec	0.014	0.014	0.013	0.013	0.013	0.014 (0.116)
Sherbrooke	0.017	0.017	0.017	0.016	0.016	0.017 (0.128)
Trois-Rivières	0.014	0.014	0.013	0.012	0.012	0.013 (0.114)
Ottawa	0.034	0.034	0.034	0.033	0.031	0.034 (0.180)
Oshawa	0.012	0.012	0.012	0.012	0.012	0.012 (0.109)
Toronto	0.045	0.046	0.046	0.043	0.041	0.045 (0.207)
Hamilton	0.013	0.014	0.013	0.013	0.012	0.013 (0.113)
StCatharines	0.013	0.014	0.014	0.014	0.013	0.014 (0.117)
Kitchener	0.012	0.013	0.013	0.014	0.013	0.013 (0.113)
London	0.016	0.016	0.017	0.016	0.016	0.016 (0.127)
Windsor	0.012	0.012	0.012	0.011	0.010	0.011 (0.106)
Sudbury	0.013	0.013	0.014	0.013	0.013	0.013 (0.115)
ThunderBay	0.011	0.011	0.011	0.011	0.010	0.011 (0.104)
Winnipeg	0.037	0.039	0.039	0.046	0.048	0.040 (0.197)
Regina	0.018	0.018	0.018	0.017	0.017	0.018 (0.133)
Saskatoon	0.016	0.017	0.017	0.016	0.016	0.016 (0.127)
Calgary	0.024	0.023	0.023	0.023	0.022	0.023 (0.151)
Edmonton	0.025	0.025	0.024	0.023	0.024	0.025 (0.155)
Vancouver	0.038	0.037	0.034	0.034	0.034	0.036 (0.186)
Victoria	0.016	0.017	0.016	0.015	0.016	0.016 (0.125)

Notes: Standard deviations are in brackets.

Table 4b: Distribution of the Observations across the CMAs from 2011  
to 2016: Shares

	2011	2012	2013	2014	2015	2016	2011-2016
Allother	0.439	0.435	0.426	0.427	0.438	0.432	0.433 (0.500)
StJohns	0.031	0.030	0.015	0.015	0.014	0.012	0.020 (0.141)
Halifax	0.024	0.023	0.026	0.027	0.022	0.021	0.024 (0.153)
Moncton	0.009	0.009	0.009	0.009	0.008	0.008	0.009 (0.093)
SaintJohn	0.008	0.008	0.007	0.008	0.007	0.007	0.008 (0.087)
Saguenay	0.011	0.011	0.012	0.012	0.013	0.012	0.012 (0.108)
Quebec	0.014	0.014	0.016	0.016	0.018	0.018	0.016 (0.125)
Sherbrooke	0.016	0.016	0.017	0.018	0.016	0.014	0.016 (0.127)
Trois-Rivières	0.012	0.012	0.013	0.013	0.014	0.013	0.013 (0.113)
Montreal	0.043	0.045	0.047	0.048	0.039	0.039	0.044 (0.204)
Ottawa	0.033	0.032	0.033	0.031	0.033	0.034	0.033 (0.178)
Kingston	0.011	0.011	0.012	0.011	0.015	0.016	0.013 (0.112)
Peterborough	0.004	0.003	0.003	0.004	0.003	0.003	0.003 (0.058)
Oshawa	0.011	0.012	0.012	0.013	0.008	0.008	0.011 (0.104)
Toronto	0.041	0.039	0.041	0.040	0.039	0.042	0.040 (0.197)
Hamilton	0.012	0.012	0.011	0.011	0.010	0.012	0.012 (0.107)
StCatharines	0.013	0.013	0.012	0.012	0.009	0.010	0.012 (0.108)
Kitchener	0.012	0.012	0.014	0.013	0.012	0.013	0.013 (0.112)
Brantford	0.007	0.007	0.006	0.007	0.006	0.007	0.007 (0.818)
Guelph	0.006	0.006	0.006	0.007	0.005	0.005	0.006 (0.077)
London	0.015	0.015	0.015	0.015	0.011	0.011	0.013 (0.115)
Windsor	0.010	0.010	0.010	0.009	0.008	0.008	0.009 (0.096)
Barrie	0.004	0.004	0.004	0.004	0.003	0.003	0.004 (0.062)
Sudbury	0.012	0.012	0.012	0.011	0.013	0.014	0.012 (0.111)
ThunderBay	0.009	0.010	0.009	0.009	0.013	0.014	0.011 (0.103)
Winnipeg	0.050	0.054	0.056	0.054	0.067	0.063	0.057 (0.231)
Regina	0.018	0.019	0.021	0.021	0.020	0.020	0.020 (0.138)

	2011	2012	2013	2014	2015	2016	2011-2016
Saskatoon	0.016	0.016	0.018	0.017	0.021	0.021	0.018 (0.133)
Calgary	0.021	0.021	0.024	0.025	0.026	0.026	0.023 (0.151)
Edmonton	0.025	0.025	0.027	0.027	0.026	0.028	0.026 (0.160)
Kelowna	0.004	0.003	0.002	0.003	0.005	0.005	0.004 (0.061)
Abbotsford	0.009	0.009	0.010	0.009	0.012	0.011	0.010 (0.100)
Vancouver	0.035	0.036	0.037	0.037	0.030	0.032	0.034 (0.182)
Victoria	0.015	0.015	0.016	0.018	0.016	0.014	0.016 (0.124)

Notes: Standard deviations are in brackets.

(Continued)

**Table 5a: Distribution of the Age Group Variables from 2006 to 2010:  
Shares**

	2006	2007	2008	2009	2010	2006-2010
Twenties	0.092	0.090	0.088	0.086	0.084	0.089 (0.284)
Thirties	0.203	0.198	0.198	0.199	0.200	0.199 (0.400)
Forties	0.257	0.249	0.239	0.232	0.224	0.243 (0.429)
Fifties	0.252	0.258	0.261	0.263	0.257	0.258 (0.437)
Sixties	0.196	0.205	0.215	0.220	0.235	0.211 (0.408)

Notes: Twenties, Thirties, Forties, Fifties, and Sixties represent 18-24, 25-34, 35-44, 45-54, and 55-64 age groups of respondents respectively. Standard deviations are in brackets.

**Table 5b: Distribution of the Age Group Variables from 2011 to 2016:  
Shares**

	2011	2012	2013	2014	2015	2016	2011-2016
Twenties	0.088	0.084	0.079	0.078	0.076	0.075	0.088 (0.272)
Thirties	0.203	0.202	0.198	0.195	0.199	0.204	0.203 (0.400)
Forties	0.220	0.223	0.221	0.221	0.218	0.220	0.220 (0.414)
Fifties	0.252	0.249	0.247	0.240	0.237	0.230	0.252 (0.429)
Sixties	0.237	0.241	0.255	0.267	0.270	0.272	0.237 (0.436)

Notes: Twenties, Thirties, Forties, Fifties, and Sixties represent 18-24, 25-34, 35-44, 45-54, and 55-64 age groups of respondents respectively. Standard deviations are in brackets.

**Table 6a: Distribution of the Educational Attainment Variables from 2006 to 2010: Shares**

	2006	2007	2008	2009	2010	2006-2010
LHS	0.159	0.150	0.145	0.139	0.134	0.147 (0.316)
HS	0.200	0.198	0.196	0.200	0.194	0.198 (0.398)
PS	0.448	0.457	0.456	0.454	0.457	0.454 (0.498)
BD	0.193	0.196	0.204	0.207	0.215	0.201 (0.425)

Notes: LHS, HS, PS, and BD represent less than high school graduation diploma, high school graduation diploma only, some post-secondary/Post-secondary certificate or diploma, and university degree (Bachelor's, Master's or PhD) respectively. Standard deviations are in brackets.

**Table 6b: Distribution of the Educational Attainment Variables from 2011 to 2016: Shares**

	2011	2012	2013	2014	2015	2016	2011-2016
LHS	0.130	0.127	0.108	0.103	0.103	0.078	0.113 (0.316)
HS	0.197	0.198	0.201	0.200	0.193	0.189	0.197 (0.398)
PS	0.456	0.451	0.454	0.455	0.450	0.425	0.453 (0.498)
BD	0.216	0.224	0.237	0.242	0.253	0.308	0.237 (0.425)

Notes: LHS, HS, PS, and BD represent less than high school graduation diploma, high school graduation diploma only, some post-secondary/Post-secondary certificate or diploma, and university degree (Bachelor's, Master's or PhD) respectively. Standard deviations are in brackets.

**Table 7a: Distribution of the Income Level Variables from 2006 to 2010:**

	Shares					
	2006	2007	2008	2009	2010	2006-2010
Ilow	0.481	0.458	0.438	0.435	0.433	0.453 (0.498)
Imidlow	0.226	0.226	0.224	0.217	0.215	0.223 (0.416)
Imidhigh	0.133	0.137	0.138	0.142	0.140	0.137 (0.344)
Ihigh	0.160	0.179	0.200	0.206	0.212	0.187 (0.390)

Notes: Ilow, Imidlow, Imidhigh, and Ihigh represent annual household income less than \$50,000, \$50,000 to less than \$75,000, \$75,000 to less than \$100,000, and \$100,000 and over respectively.

**Table 7b: Distribution of the Income Level Variables from 2011 to 2016: Shares**

	2011	2012	2013	2014	2015	2016	2011-2016
Ilow	0.427	0.410	0.370	0.363	0.347	0.346	0.427 (0.490)
Imidlow	0.164	0.165	0.165	0.159	0.155	0.156	0.164 (0.368)
Imidhigh	0.183	0.179	0.187	0.189	0.194	0.192	0.183 (0.390)
Ihigh	0.226	0.246	0.278	0.289	0.303	0.305	0.226 (0.445)

Notes: Ilow, Imidlow, Imidhigh, and Ihigh represent annual household income less than \$50,000, \$50,000 to less than \$75,000, \$75,000 to less than \$100,000, and \$100,000 and over respectively. Standard deviations are in brackets.

**Table 8a: Distribution of the Number of Household Members 18 and Over Variables from 2006 to 2010: Shares**

	2006	2007	2008	2009	2010	2006-2010
1 Adult	0.296	0.300	0.302	0.297	0.307	0.300 (0.458)
2 Adults	0.555	0.553	0.554	0.557	0.548	0.554 (0.497)
3 Adults	0.107	0.105	0.104	0.106	0.104	0.105 (0.307)
4 Adults	0.035	0.034	0.033	0.033	0.035	0.034 (0.181)

	2006	2007	2008	2009	2010	2006-2010
4+ Adults	0.008	0.007	0.007	0.007	0.007	0.007 (0.085)

(Continued)

Notes: The households with more than 5 adults are put in the same group with the households with exactly 5 adults for 2006, 2007, and 2008. Standard deviations are in brackets.

**Table 8b: Distribution of the Number of Household Members 18 and Over Variables from 2011 to 2016: Shares**

	2011	2012	2013	2014	2015	2016	2011-2016
1 Adult	0.307	0.310	0.286	0.289	0.285	0.292	0.296 (0.456)
2 Adults	0.545	0.546	0.562	0.556	0.562	0.560	0.554 (0.497)
3 Adults	0.104	0.103	0.108	0.110	0.109	0.104	0.106 (0.308)
4 Adults	0.037	0.035	0.037	0.037	0.037	0.037	0.037 (0.188)
5 Adults	0.007	0.007	0.007	0.008	0.007	0.008	0.007 (0.007)

Notes: The number of adults is capped at 5 or 4 in the TSRC, depending on the household composition. Standard deviations are in brackets.

**Table 9a: Distribution of the Number of Household Members Less than 18 Years of Age Variables from 2006 to 2010: Shares**

	2006	2007	2008	2009	2010	2006-2010
0 Child	0.614	0.622	0.629	0.631	0.637	0.625 (0.484)
1 Child	0.165	0.163	0.159	0.157	0.160	0.161 (0.368)
2 Children	0.159	0.154	0.152	0.153	0.145	0.153 (0.360)
3 Children	0.048	0.047	0.046	0.045	0.046	0.046 (0.210)
4 Children	0.014	0.015	0.014	0.015	0.013	0.014 (0.119)

Notes: The households with more than 4 children are put in the same group with the households with exactly 4 children for 2006, 2007, and 2008. Standard deviations are in brackets.

Table 9b: Distribution of the Number of Household Members Less than 18 Years of Age Variables from 2011 to 2016: Shares

	2011	2012	2013	2014	2015	2016	2011-2016
0 Child	0.643	0.641	0.637	0.639	0.642	0.643	0.641 (0.480)
1 Child	0.153	0.151	0.150	0.151	0.146	0.148	0.150 (0.357)
2 Children	0.147	0.148	0.151	0.150	0.151	0.149	0.149 (0.356)
3 Children	0.044	0.046	0.048	0.047	0.047	0.046	0.046 (0.209)
4 Children	0.014	0.014	0.014	0.014	0.014	0.014	0.014 (0.117)

Notes: The number of children is capped at 2, 3, or 4 in the TSRC, depending on the household composition.

Standard deviations are in brackets.

Table 10a: OLS Regression Results of the Overnight Trip Equation from 2006-2010 (Except the CMA Variables): Estimated Coefficients and Standard Deviations in the Brackets

	2006	2007	2008	2009	2010	2006-10
CCPI	NA	NA	NA	NA	NA	-0.0406682 (0.0390193)
Summer	0.1458576*** (0.0047518)	0.1506331*** (0.0048201)	0.1418878*** (0.0048687)	0.1453038*** (0.0067399)	0.1452383*** (0.0069402)	0.1459306*** (0.0024095)
Fall	0.0042228 (0.0042627)	0.0121719*** (0.004337)	0.0029026 (0.0043617)	0.000417 (0.0060784)	-0.0046101 (0.0062222)	0.0042545** (0.0021629)
Winter	-0.0061275 (0.0042406)	-0.0145512*** (0.0041974)	-0.0193753*** (0.0042542)	-0.0089698 (0.0059569)	-0.0183158*** (0.0060253)	-0.0133891*** (0.0021155)
Newfoundland and Labrador	-0.0306611*** (0.008887)	-0.0339712*** (0.0090454)	-0.0376402*** (0.0089472)	-0.0467421*** (0.011668)	-0.0461205*** (0.0122661)	-0.0374605*** (0.0044059)
Prince Edward Island	-0.0843131*** (0.0101813)	-0.0844333*** (0.0101694)	-0.0883501*** (0.0098091)	-0.0895747*** (0.0140386)	-0.0927055*** (0.0145956)	-0.0870486*** (0.0050329)
Nova Scotia	-0.0294778*** (0.009827)	-0.0281139*** (0.0098941)	-0.0248432** (0.0099684)	-0.0421036*** (0.0139034)	-0.0329827** (0.0144238)	-0.0299089*** (0.0049622)
New Brunswick	-0.0220579** (0.0087714)	-0.011334 (0.0089907)	-0.0338043*** (0.0086729)	-0.0154864 (0.0127189)	-0.0476567*** (0.0124753)	-0.0246806*** (0.0044164)
Quebec	-0.0187668*** (0.0068892)	-0.0113515 (0.0069205)	-0.0259952*** (0.0068555)	-0.0022471 (0.0099949)	-0.0381298*** (0.0102452)	-0.0189101*** (0.003476)

	2006	2007	2008	2009	2010	2006-10
Manitoba	0.0376406*** (0.0107127)	0.0509151*** (0.011242)	0.0106371 (0.0105585)	0.0432498*** (0.0146062)	0.0335124** (0.0149459)	0.0349598*** (0.005371)
Saskatchewan	0.1064687*** (0.0115975)	0.1105733*** (0.0117623)	0.0892755*** (0.0111537)	0.0972703*** (0.0156452)	0.1217648*** (0.0163425)	0.1037231*** (0.005723)
Alberta	0.0053788 (0.00897)	0.0493189*** (0.0094254)	0.0364372*** (0.0092664)	0.0211644 (0.0132886)	0.0019173 (0.0135766)	0.0261865*** (0.0046436)
British Columbia	-0.043213*** (0.0083667)	-0.041506*** (0.0082647)	-0.0547718*** (0.0083401)	-0.0249084** (0.0122846)	-0.0316196** (0.0126786)	-0.0416166*** (0.0042241)
Twenties	0.1285644*** (0.0066014)	0.1220619*** (0.0066658)	0.1286858*** (0.0068582)	0.1326337*** (0.0095617)	0.1342069*** (0.0100616)	0.1281119*** (0.0033795)
Thirties	0.0500938*** (0.0049724)	0.0540057*** (0.0050981)	0.0501322*** (0.0050662)	0.0746065*** (0.007115)	0.0477988*** (0.0071505)	0.0537919*** (0.0025217)
Forties	0.006935 (0.0046049)	0.0050226 (0.0047004)	0.0027081 (0.0047381)	0.011194* (0.0066851)	0.0231391*** (0.0069851)	0.0079762*** (0.0023559)
Sixties	0.020312*** (0.0047715)	0.0146188*** (0.0047412)	0.0123585*** (0.0046329)	0.0172283*** (0.0064908)	0.0283738*** (0.0065754)	0.0174148*** (0.0023441)
Male	-0.0318168*** (0.0032448)	-0.0381448*** (0.0032778)	-0.0376576*** (0.0032777)	-0.0418973*** (0.0046)	-0.0389507*** (0.0047142)	-0.0369924*** (0.0016364)
LHS	-0.1175261*** (0.0062114)	-0.1123716*** (0.0062618)	-0.1027813*** (0.0062728)	-0.112092*** (0.0093159)	-0.1075353*** (0.0096973)	-0.1109207*** (0.0031804)

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	2006	2007	2008	2009	2010	2006-10
HS	-0.0579329*** (0.0060046)	-0.0560732*** (0.0062783)	-0.0589246*** (0.0062869)	-0.0581747*** (0.0092623)	-0.0584675*** (0.0092508)	-0.057949*** (0.0031358)
BD	0.1241167*** (0.0089983)	0.1247574*** (0.0093772)	0.1306834*** (0.0095245)	0.1038519*** (0.0130057)	0.1201866*** (0.0133836)	0.1226711*** (0.0046485)
Unemployment	-0.0230148*** (0.0057848)	-0.0288818*** (0.0057805)	-0.0343913*** (0.0056293)	-0.0374966*** (0.0078709)	-0.0269352*** (0.0078144)	-0.0297641*** (0.0028395)
Imidlow	0.0872829*** (0.0060935)	0.1018272*** (0.0061692)	0.098257*** (0.0061859)	0.0936001*** (0.0088504)	0.0927546*** (0.0089284)	0.0950635*** (0.0030906)
Imidhigh	0.156772*** (0.0079509)	0.1528266*** (0.0077581)	0.1500099*** (0.0078269)	0.1474646*** (0.0108112)	0.1516662*** (0.0109107)	0.1520118*** (0.0038991)
Ihigh	0.2475857*** (0.0086808)	0.2611631*** (0.0081517)	0.2431158*** (0.007801)	0.2479576*** (0.0107504)	0.2726261*** (0.0110059)	0.252424*** (0.0040151)
One Adult	0.0148042*** (0.0038406)	0.0151659*** (0.0039592)	0.0127482*** (0.0039046)	0.0238227*** (0.0055382)	0.0230631*** (0.0056552)	0.0164329*** (0.0019571)
Three Adults	-0.0239303*** (0.0056038)	-0.0365968*** (0.0055851)	-0.0352705*** (0.0056625)	-0.0297672*** (0.0078229)	-0.0320273*** (0.0080306)	-0.0315084*** (0.0028055)
Four Adults	-0.0531459*** (0.0092223)	-0.0639305*** (0.0094803)	-0.0534159*** (0.0095744)	-0.0481765*** (0.0138981)	-0.0515292*** (0.0132999)	-0.054943*** (0.0047346)
Five Adults	-0.0801453*** (0.0183656)	-0.0765224*** (0.0183926)	-0.0853154*** (0.0181212)	-0.087117*** (0.0266744)	-0.0318523 (0.0316102)	-0.0755526*** (0.009449)

(Continued)

	2006	2007	2008	2009	2010	2006-10
One Child	-0.0368526*** (0.0046064)	-0.0459987*** (0.0046508)	-0.0408872*** (0.004745)	-0.0461864*** (0.0067122)	-0.0411056*** (0.0067825)	-0.0418169*** (0.0023453)
Two Children	-0.0322115*** (0.0049778)	-0.0375705*** (0.005156)	-0.0350904*** (0.0052129)	-0.0302918*** (0.0072594)	-0.043031*** (0.0074799)	-0.0352871*** (0.0025683)
Three Children	-0.0455444*** (0.0077709)	-0.0293052*** (0.0081684)	-0.0393318*** (0.0081856)	-0.0278023** (0.0116582)	-0.0492294*** (0.0116557)	-0.0381207*** (0.0040434)
Four Children	-0.0450095*** (0.0129285)	-0.0663941*** (0.012808)	-0.0784487*** (0.0123135)	-0.0345516* (0.0187229)	-0.0275436 (0.0200267)	-0.0551084*** (0.0064744)
Constant	0.1241121*** (0.0093169)	0.1188429*** (0.0095441)	0.1229986*** (0.0094438)	0.1087923*** (0.0134173)	0.1103726*** (0.0143117)	-0.0418169*** (0.0023453)
Number of Observations	119,359	119,415	117,907	61,328	59,288	477,297
R-squared	0.0736	0.077	0.0747	0.0768	0.0778	0.075
F-Statistic	127.24	136.58	132.85	70.8	69.14	523.63
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01. The values in brackets are the standard errors of the corresponding estimated coefficients.

(Continued)

Table 10a (CMA): OLS Regression Results of the Overnight Trip Equation from 2006-2010 (Only the Coefficients of CMA Variables Are Listed Here, But All of the Other Regressors Are Included in the Estimation Procedure): Estimated Coefficients and Standard Deviations in the Brackets

	2006	2007	2008	2009	2010	2006-10
Allother	0.0989526*** (0.0086292)	0.1001166*** (0.0088531)	0.098735*** (0.0087478)	0.1094353*** (0.0125561)	0.1146515*** (0.0134104)	0.1023851*** (0.0044218)
StJohns	0.0553859*** (0.0155919)	0.044262*** (0.0152995)	0.0355723** (0.0151835)	0.0878109*** (0.0204155)	0.0592992*** (0.0203306)	0.0527212*** (0.0075245)
Halifax	0.0816601*** (0.0159996)	0.097834*** (0.0160305)	0.0837452*** (0.0160414)	0.1266422*** (0.0229839)	0.1019816*** (0.023466)	0.0943527*** (0.0080592)
SaintJohn	0.0589634*** (0.0214526)	0.0798657*** (0.0217633)	0.0977983*** (0.0238282)	0.0675233** (0.0308586)	0.1292499*** (0.0333404)	0.0843811*** (0.0112207)
Saguenay	0.117453*** (0.0177233)	0.10806*** (0.0176281)	0.1063683*** (0.0180367)	0.1365247*** (0.0268814)	0.1665028*** (0.0294431)	0.1206814*** (0.0091456)
Quebec	0.134346*** (0.0185895)	0.1444159*** (0.0179309)	0.1525451*** (0.0180193)	0.1286342*** (0.0254593)	0.1798129*** (0.0266813)	0.1462502*** (0.0091191)
Sherbrooke	0.1357287*** (0.0160393)	0.143443*** (0.0168628)	0.1802074*** (0.0175412)	0.1744626*** (0.0247845)	0.1874042*** (0.0256513)	0.1598749*** (0.0085263)
Trois-Rivières	0.1456428*** (0.0178626)	0.1084819*** (0.0173591)	0.12857*** (0.0181678)	0.1862156*** (0.0281021)	0.140469*** (0.0282784)	0.1362969*** (0.0091471)

	2006	2007	2008	2009	2010	2006-10
Montreal	0.0762629*** (0.0124648)	0.0661684*** (0.0126803)	0.0797531*** (0.0124737)	0.065977*** (0.0178154)	0.0777835*** (0.0182943)	0.0733696*** (0.0062931)
Ottawa	0.1070974*** (0.0122733)	0.1145012*** (0.0125576)	0.0977542*** (0.0123649)	0.0925964*** (0.0175705)	0.1107726*** (0.0189477)	0.1054314*** (0.0062579)
Oshawa	0.0576309*** (0.0164455)	0.0577104*** (0.0168446)	0.069721*** (0.0172403)	0.130281*** (0.0253843)	0.1231879*** (0.0267023)	0.0780106*** (0.0086203)
Hamilton	0.0426919*** (0.0157626)	0.0623347*** (0.0150589)	0.0482383*** (0.015864)	0.006944 (0.022395)	-0.0029177 (0.0217859)	0.0395315*** (0.0077885)
StCatharines	0.0132283 (0.0144772)	0.0360504** (0.0144041)	0.0398568*** (0.0147857)	0.0263341 (0.0194206)	0.0695237*** (0.0218783)	0.0342296*** (0.00728)
Kitchener	0.0894954*** (0.0170395)	0.1031322*** (0.016799)	0.1206164*** (0.0173926)	0.0940809*** (0.0227493)	0.1246632*** (0.0241668)	0.1057769*** (0.008468)
London	0.0938575*** (0.0148014)	0.1075401*** (0.0157021)	0.1011339*** (0.0153704)	0.1183916*** (0.0216724)	0.1523555*** (0.0227816)	0.1093229*** (0.0076979)
Windsor	0.0300428* (0.01592)	0.0360378** (0.0158616)	0.0332332** (0.0165003)	0.0476361** (0.0223209)	0.0413949* (0.0231138)	0.0360897*** (0.0080421)
Sudbury	0.1175836*** (0.0162212)	0.1429366*** (0.0177802)	0.1346258*** (0.0165485)	0.1387764*** (0.0243675)	0.182352*** (0.0259088)	0.138824*** (0.0085429)
ThunderBay	0.0149854 (0.0153205)	0.0457993*** (0.0163555)	0.0410761*** (0.015393)	0.0336598 (0.0213376)	0.0634291** (0.0257105)	0.037203*** (0.0079491)

(Continued)

	2006	2007	2008	2009	2010	2006-10
Winnipeg	0.0032473 (0.015172)	-0.0060475 (0.0153973)	0.0228839 (0.0148463)	0.0062558 (0.0204478)	-0.0033929 (0.0209866)	0.004467 (0.0074959)
Regina	0.0280887 (0.0189418)	0.0098599 (0.0189479)	0.0394403** (0.0188236)	0.012123 (0.0263028)	0.0175701 (0.0288134)	0.0233556** (0.0095185)
Saskatoon	0.0707079*** (0.0193147)	0.0564052*** (0.0195932)	0.0572851*** (0.0192472)	0.0555405** (0.0278654)	0.0022485 (0.0281363)	0.053922*** (0.0097423)
Calgary	0.0045933 (0.0152116)	0.0080066 (0.0160462)	0.0141876 (0.0159516)	0.0327672 (0.0226906)	0.0251939 (0.0229882)	0.0134891* (0.0079187)
Edmonton	-0.000959 (0.0147246)	-0.0163751 (0.0153126)	-0.0036467 (0.0156915)	-0.0151869 (0.021593)	0.0239343 (0.0227329)	-0.0044545 (0.0076722)
Vancouver	0.0064103 (0.0128908)	0.0149187 (0.013254)	0.0437048*** (0.0134543)	-0.0037105 (0.019266)	0.0244034 (0.0201838)	0.0182247*** (0.0066837)
Victoria	0.0839086*** (0.0164757)	0.0937133*** (0.0163655)	0.1038456*** (0.0170267)	0.1178813*** (0.0251375)	0.1053688*** (0.0250157)	0.097813*** (0.0084413)

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01. The values in brackets are the standard errors of the corresponding estimated coefficients.

(Continued)

Table 10b: OLS Regression Results of the Overnight Trip Equation from 2011-2016 (Except the CMA Variables): Estimated Coefficients and Standard Deviations in the Brackets

	2011	2012	2013	2014	2015	2016	2011-16
CCPI	NA	NA	NA	NA	NA	NA	-0.1503565*** (0.0528203)
Summer	0.1280351*** (0.004476)	0.1408801*** (0.0046082)	0.1495778*** (0.0050282)	0.144356*** (0.0049987)	0.1403018*** (0.0051088)	0.1340356*** (0.0046863)	0.1391126*** (0.0019612)
Fall	0.0121515*** (0.0039644)	0.0195556*** (0.00401)	0.0172461*** (0.0043421)	0.0220261*** (0.0043696)	0.0135577*** (0.0044453)	0.0168785*** (0.004061)	0.0168102*** (0.0017096)
Winter	-0.0017637 (0.0036008)	0.0104755*** (0.0039589)	0.0001434 (0.0042356)	0.0064117 (0.0042906)	0.0024597 (0.0044015)	0.0068617* (0.0039974)	0.0048176*** (0.001652)
Newfoundland and Labrador	0.0096542 (0.008354)	0.0038476 (0.0087317)	0.0000346 (0.0118713)	-0.0186541 (0.0117607)	-0.01051 (0.0122509)	-0.0007042 (0.011288)	0.0011319 (0.0041723)
Nova Scotia	-0.0499257*** (0.0091304)	-0.0573892*** (0.010481)	-0.0574416*** (0.0111145)	-0.0528507*** (0.0111365)	-0.0753281*** (0.0110397)	-0.0458373*** (0.0104935)	-0.0560386*** (0.0042875)
Prince Edward Island	0.007001 (0.00923)	-0.0126054 (0.0099991)	-0.0041728 (0.010862)	-0.0118025 (0.0108435)	-0.0159811 (0.0109756)	-0.0041202 (0.0099251)	-0.0068799* (0.0041838)
New Brunswick	-0.0038607 (0.008849)	-0.0128033 (0.0097443)	-0.0082354 (0.010376)	-0.0255579** (0.0102448)	-0.0272186** (0.0108596)	0.0064085 (0.0099487)	-0.0114017*** (0.0040604)
Quebec	-0.0033914 (0.0068023)	0.0014449 (0.0074542)	0.0014865 (0.0079451)	-0.0217966*** (0.0079466)	-0.0096062 (0.0083396)	-0.0140816* (0.0073068)	-0.0077442** (0.0030971)

	2011	2012	2013	2014	2015	2016	2011-16
Manitoba	0.0387422*** (0.0094224)	0.0487966*** (0.0106848)	0.031031*** (0.0110427)	0.0225492** (0.0113531)	0.0134343 (0.0116421)	0.029766*** (0.0109172)	0.0323778*** (0.0044038)
Saskatchewan	0.1030722*** (0.0101886)	0.1054207*** (0.0112692)	0.0984196*** (0.0122477)	0.0839492*** (0.012155)	0.0741727*** (0.0123223)	0.0590113*** (0.010853)	0.0879743*** (0.0046703)
Alberta	0.067834*** (0.009316)	0.0400472*** (0.0097856)	0.0330694*** (0.0100579)	0.0186806* (0.0101963)	0.0040085 (0.0103963)	0.0346486*** (0.0094792)	0.0345094*** (0.0040219)
British Columbia	0.0312796*** (0.0095796)	0.0285827*** (0.0104993)	0.0276435** (0.0108867)	0.0322779*** (0.011027)	0.0212876* (0.0109733)	0.0259189*** (0.0096659)	0.0267307*** (0.0042355)
Twenties	0.1240438*** (0.006056)	0.1228768*** (0.0065512)	0.1239795*** (0.0072425)	0.119498*** (0.0074201)	0.1200935*** (0.0074479)	0.0889029*** (0.0067839)	0.1173282*** (0.0028072)
Thirties	0.0468447*** (0.0044076)	0.0531373*** (0.0047758)	0.0565197*** (0.0051877)	0.040186*** (0.0052286)	0.0471179*** (0.0053268)	0.0323823*** (0.0048579)	0.0456869*** (0.0020137)
Forties	0.0106998** (0.0042913)	0.0121629*** (0.0046195)	0.0195802*** (0.0050967)	0.0195867*** (0.0052244)	0.0186948*** (0.0052419)	0.0146678*** (0.0048952)	0.0150618*** (0.001982)
Sixties	0.0056982 (0.0039644)	0.0078023* (0.0042606)	0.0033372 (0.0045858)	0.003994 (0.0046529)	0.0112588** (0.0046664)	0.013635*** (0.0044149)	0.0066732*** (0.0017943)
Male	-0.0208644*** (0.0028683)	-0.027286*** (0.0031082)	-0.0287563*** (0.0033616)	-0.0291451*** (0.0033656)	-0.0319537*** (0.0034144)	-0.0245786*** (0.0031502)	-0.0267058*** (0.0013044)
LHS	-0.081076*** (0.0059582)	-0.0909138*** (0.0063868)	-0.0868805*** (0.007071)	-0.1007792*** (0.0069592)	-0.0737884*** (0.007625)	-0.0598313*** (0.0070578)	-0.0823587*** (0.0027728)

(Continued)

	2011	2012	2013	2014	2015	2016	2011-16
HS	-0.0437137*** (0.0056399)	-0.0473866*** (0.0062563)	-0.0298551*** (0.0066479)	-0.0442412*** (0.0066502)	-0.0541715*** (0.0070992)	-0.02997*** (0.0062897)	-0.0416317*** (0.0026072)
BD	0.0937484*** (0.0080768)	0.0826491*** (0.008867)	0.0749878*** (0.0092681)	0.074829*** (0.0093415)	0.0772502*** (0.0092941)	0.0798948*** (0.0085458)	0.0806622*** (0.0036221)
Unemployment	-0.0184657*** (0.0048537)	-0.0133533** (0.0053764)	-0.0103625* (0.0057821)	-0.0208154*** (0.005825)	-0.0202989*** (0.0058585)	-0.0104253** (0.0053193)	-0.0160901*** (0.0022326)
Imidlow	0.067329*** (0.0058087)	0.0561869*** (0.0063945)	0.0600621*** (0.0067808)	0.0686575*** (0.0071038)	0.0559581*** (0.0071385)	0.0538023*** (0.0063652)	0.0604595*** (0.0026798)
Imidhigh	0.1131164*** (0.0061184)	0.1012187*** (0.0066357)	0.0978588*** (0.0068837)	0.0975656*** (0.0069882)	0.1010147*** (0.0071529)	0.0948437*** (0.0064457)	0.1005504*** (0.0027292)
Ihigh	0.1719265*** (0.0065123)	0.1759054*** (0.0068743)	0.1750059*** (0.0070164)	0.1732724*** (0.0070439)	0.1718722*** (0.0070495)	0.1763759*** (0.0064295)	0.1720506*** (0.0027725)
One Adult	0.0160268*** (0.0034519)	0.0152875*** (0.0037088)	0.02712*** (0.0040713)	0.0129899*** (0.0040786)	0.0216557*** (0.0041438)	0.0149776*** (0.0038189)	0.017362*** (0.0015736)
Three Adults	-0.0295194*** (0.0049834)	-0.0352647*** (0.0052407)	-0.0309317*** (0.005526)	-0.0311322*** (0.005643)	-0.0289949*** (0.0056722)	-0.0253103*** (0.0053867)	-0.0302041*** (0.0022014)
Four Adults	-0.0472034*** (0.0077992)	-0.0764646*** (0.0082136)	-0.04184*** (0.0091546)	-0.0516029*** (0.0089767)	-0.0453576*** (0.0090977)	-0.0529325*** (0.0081741)	-0.0530511*** (0.0034823)
Five Adults	-0.0789546*** (0.015235)	-0.0628408*** (0.0174687)	-0.0782141*** (0.0189175)	-0.045577** (0.0190009)	-0.0792608*** (0.019017)	-0.085629*** (0.0171298)	-0.0715932*** (0.0072089)

(Continued)

	2011	2012	2013	2014	2015	2016	2011-16
One Child	-0.025056*** (0.0042516)	-0.0278242*** (0.0045379)	-0.0312396*** (0.005)	-0.0269645*** (0.005046)	-0.0320211*** (0.0051053)	-0.0293838*** (0.0046543)	-0.0284498*** (0.0019335)
Two Children	-0.0166293*** (0.0046686)	-0.019008*** (0.0050226)	-0.0226671*** (0.0054291)	-0.0212844*** (0.0054949)	-0.0237801*** (0.0055116)	-0.0206222*** (0.0050956)	-0.0202562*** (0.002114)
Three Children	-0.0304613*** (0.0072734)	-0.0357998*** (0.0077978)	-0.0422323*** (0.0082861)	-0.0356726*** (0.0083721)	-0.0190216** (0.0089241)	-0.0225386*** (0.0079793)	-0.0310734*** (0.0032908)
Four Children	-0.0451283*** (0.0114133)	-0.0433244*** (0.0129703)	-0.0576685*** (0.0129213)	-0.0205954 (0.0147676)	-0.0241238* (0.0139381)	-0.0313052** (0.0128431)	-0.0384865*** (0.0053291)
Constant	0.0368723*** (0.0081919)	0.0546025*** (0.0092204)	0.0444394*** (0.0097449)	0.0562538*** (0.0100056)	0.0397683*** (0.0105243)	0.021076** (0.0092577)	0.0412914*** (0.003896)
Number of Observations	124,445	110,196	94,104	90,941	88,158	97,022	604,866
R-squared	0.0601	0.0602	0.0603	0.0584	0.0579	0.0570	0.0578
F-Statistic	95.16	85.32	71.79	70.10	66.03	69.00	440.62
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01. The values in brackets are the standard errors of the corresponding estimated coefficients.

(Continued)

Table 10b (CMA): OLS Regression Results of the Overnight Trip Equation from 2011-2016 (Only the Coefficients of CMA Variables Are Listed Here, But All of the Other Regressors Are Included in the Estimation Procedure): Estimated Coefficients and Standard Deviations in the Brackets

	2011	2012	2013	2014	2015	2016	2011-16
Allother	0.1062289*** (0.0080408)	0.0878134*** (0.0091786)	0.0918336*** (0.0097525)	0.089831*** (0.0099585)	0.1069602*** (0.0106456)	0.0899336*** (0.0091472)	0.0959778*** (0.0038219)
StJohns	0.0628134*** (0.0129232)	0.0140755 (0.0137233)	0.025672 (0.0188077)	0.0450777** (0.0190432)	0.0501276** (0.019915)	0.0377374** (0.0185356)	0.0414134*** (0.0066074)
Halifax	0.0755775*** (0.0143417)	0.0728654*** (0.0156909)	0.0620632*** (0.0168195)	0.0935279*** (0.0170235)	0.0896921*** (0.0179044)	0.0825007*** (0.0164533)	0.0804786*** (0.0066274)
Moncton	0.1262107*** (0.0179823)	0.0591899*** (0.0181091)	0.0963048*** (0.022081)	0.0886368*** (0.0210138)	0.1273501*** (0.0235499)	0.1262687*** (0.0234967)	0.10382*** (0.0084561)
SaintJohn	0.0841443*** (0.0187754)	0.0831377*** (0.0209109)	0.0514095** (0.0215255)	0.0754869*** (0.0226869)	0.1279619*** (0.0253551)	0.0493835** (0.0211828)	0.078852*** (0.0087934)
Saguenay	0.1666879*** (0.017701)	0.1227388*** (0.0185299)	0.1218377*** (0.0196262)	0.135551*** (0.019435)	0.1162584*** (0.0194266)	0.131035*** (0.0179621)	0.1336382*** (0.0076464)
Quebec	0.1379431*** (0.0164685)	0.1143425*** (0.0172903)	0.1152104*** (0.0180688)	0.1148665*** (0.0180714)	0.1009911*** (0.0177971)	0.1133916*** (0.0161407)	0.116217*** (0.0070335)
Sherbrooke	0.1371217*** (0.0151321)	0.1330223*** (0.0169428)	0.1122129*** (0.0171841)	0.1623063*** (0.0182939)	0.1383822*** (0.0184763)	0.1139507*** (0.0171267)	0.1347995*** (0.0069926)

	2011	2012	2013	2014	2015	2016	2011-16
Trois-Rivières	0.1300407*** (0.0168613)	0.1045061*** (0.0185914)	0.1104415*** (0.0187662)	0.1127041*** (0.0184201)	0.1290508*** (0.0200317)	0.1166453*** (0.0176881)	0.1176081*** (0.0074874)
Montreal	0.0437133*** (0.0109595)	0.0338547*** (0.0122346)	0.0372789*** (0.013095)	0.0555288*** (0.0131773)	0.0471862*** (0.0141259)	0.044105*** (0.0124065)	0.0447682*** (0.0051265)
Ottawa	0.1138851*** (0.0110381)	0.064642*** (0.0119356)	0.0871744*** (0.0130661)	0.0830647*** (0.0134249)	0.1014533*** (0.0136942)	0.0852289*** (0.0121113)	0.0904042*** (0.0050793)
Kingston	0.1579144*** (0.0159255)	0.1287653*** (0.017105)	0.1578016*** (0.0185309)	0.1333638*** (0.0187661)	0.1134553*** (0.0167684)	0.1259946*** (0.0159221)	0.1349796*** (0.0069557)
Peterborough	0.1322348*** (0.025494)	0.18825*** (0.0331084)	0.2035532*** (0.0368482)	0.0992669*** (0.0308883)	0.1220501*** (0.0355378)	0.1573702*** (0.0359405)	0.1501355*** (0.0132949)
Oshawa	0.0976314*** (0.015095)	0.0649795*** (0.0158895)	0.0474596*** (0.016128)	0.081131*** (0.0167788)	0.0979891*** (0.0210384)	0.0859827*** (0.0191499)	0.0798454*** (0.0069304)
Hamilton	0.0312995** (0.013086)	0.0257059* (0.0149008)	0.0487401*** (0.0162364)	0.0645134*** (0.017514)	0.0305214* (0.0177341)	0.0184566 (0.0142587)	0.035516*** (0.0062893)
StCatharines	0.0645331*** (0.0127582)	0.0179825 (0.013357)	0.0361572** (0.0149085)	0.0309703** (0.0157701)	0.0534097*** (0.0185687)	0.0158299 (0.0146442)	0.0382771*** (0.0060077)
Kitchener	0.117028*** (0.0162307)	0.0941683*** (0.0162574)	0.0899777*** (0.0171316)	0.0729515*** (0.0171085)	0.0849652*** (0.0184991)	0.0869756*** (0.0166606)	0.0925086*** (0.0069172)
Brantford	0.0547369*** (0.0171806)	0.0574716*** (0.0199121)	0.0469917** (0.0204894)	0.0562226*** (0.0206299)	0.0128502 (0.0195984)	0.0391217** (0.0173434)	0.0468174*** (0.0078601)

(Continued)

	2011	2012	2013	2014	2015	2016	2011-16
Guelph	0.1922156*** (0.0234122)	0.1459526*** (0.0237924)	0.1279702*** (0.025023)	0.1384144*** (0.0233737)	0.0755853*** (0.0275544)	0.1065728*** (0.0267663)	0.1390241*** (0.0101913)
London	0.0889287*** (0.0131333)	0.0914726*** (0.0146871)	0.110345*** (0.0166876)	0.1045855*** (0.0169346)	0.0870434*** (0.0183915)	0.1152334*** (0.0177907)	0.0999511*** (0.0065116)
Windsor	0.0337904*** (0.012679)	0.0051414 (0.0144085)	-0.0090778 (0.0157248)	0.0465947*** (0.0175937)	0.0175432 (0.0175945)	0.030498* (0.0163744)	0.0211498*** (0.0063138)
Barrie	0.1097185*** (0.0262846)	0.1700088*** (0.0290993)	0.1243741*** (0.0307954)	0.1276427*** (0.0311394)	0.1795222*** (0.0386293)	0.0516648* (0.0280066)	0.1276163*** (0.0123866)
Sudbury	0.1637952*** (0.0154427)	0.1416859*** (0.0167216)	0.15896*** (0.0186446)	0.1370678*** (0.0183164)	0.1516909*** (0.0178016)	0.1509787*** (0.0163133)	0.1506945*** (0.0069748)
ThunderBay	-0.0001767 (0.0130151)	-0.0184153 (0.0144022)	0.001058 (0.016202)	-0.0284458* (0.0156149)	0.0185714 (0.0151895)	0.0585741*** (0.0146793)	0.0075732 (0.0060571)
Winnipeg	-0.0075134 (0.0125115)	-0.0376252*** (0.0139261)	-0.0244951* (0.0145224)	-0.0306968** (0.0148918)	-0.0089392 (0.015139)	-0.0189795 (0.0139508)	-0.0227184*** (0.0057412)
Regina	0.0291889* (0.016929)	0.0116111 (0.0182706)	0.0041316 (0.0192172)	0.0121459 (0.0195852)	0.0174297 (0.0196161)	0.0411266** (0.0176778)	0.0204531*** (0.0075459)
Saskatoon	0.0599403*** (0.0173981)	0.0383267** (0.019553)	0.0380718* (0.0201822)	0.0678246*** (0.0215612)	0.0608821*** (0.0196309)	0.0710795*** (0.017846)	0.0545558*** (0.0078373)
Calgary	0.0007845 (0.0150869)	0.005993 (0.0162495)	0.0013541 (0.0162546)	0.0060437 (0.0162154)	0.0074416 (0.0163666)	0.0027598 (0.0151977)	0.0034794 (0.0064692)

(Continued)

	2011	2012	2013	2014	2015	2016	2011-16
Edmonton	-0.0301384** (0.0136645)	-0.026589* (0.0149601)	0.005156 (0.0157326)	-0.0127919 (0.0154213)	0.0322848** (0.0164737)	-0.0038224 (0.0146762)	-0.0068519 (0.0061541)
Kelowna	0.0867914*** (0.0256793)	0.1014963*** (0.0371661)	0.0753384** (0.0376972)	0.0243658 (0.0304274)	0.0651587** (0.0265655)	0.0307696 (0.0232541)	0.0601428*** (0.0117723)
Abbotsford	-0.0238356 (0.0156034)	-0.0159969 (0.0182311)	-0.0357407* (0.0190656)	-0.0050169 (0.0197948)	0.0130265 (0.0190966)	-0.004452 (0.0167655)	-0.0113806 (0.0073302)
Vancouver	-0.0522386*** (0.0126638)	-0.0702145*** (0.0141039)	-0.0478438*** (0.0149232)	-0.0692257*** (0.0151481)	-0.0202165 (0.0160859)	-0.0324584** (0.0138556)	-0.0484851*** (0.0058393)
Victoria	0.0756884*** (0.0167753)	0.0405758** (0.0178605)	0.0294184 (0.0184121)	0.0339995* (0.0185378)	0.0759898*** (0.0195412)	0.057666*** (0.0185046)	0.0545603*** (0.007412)

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01. The values in brackets are the standard errors of the corresponding estimated coefficients.

(Continued)

Table 11a: The OLS Regression Results of the Interaction Terms from 2006-2010: Estimated Coefficients and Standard Deviations in the Brackets

	2006	2007	2008	2009	2010	2006-2010
lhs#imidlow	0.0069691 (0.010784)	0.00076 (0.0111825)	-0.0298613*** (0.0106614)	-0.0040414 (0.0155985)	-0.0041595 (0.0160712)	-0.006063 (0.0054842)

	2006	2007	2008	2009	2010	2006-2010
lhs#imidhigh	0.0091033 (0.0177064)	0.0133959 (0.0176063)	-0.0119134 (0.0165553)	-0.0045414 (0.0254781)	-0.0036228 (0.0238204)	0.0017982 (0.0086604)
lhs#ihigh	-0.0282639 (0.0214619)	-0.0374318* (0.0207004)	-0.0621754*** (0.0186033)	-0.0668879*** (0.0258447)	-0.068563** (0.0307315)	-0.0492606*** (0.0100699)
lhs#uem	0.0014562 (0.0084243)	0.0090196 (0.008532)	0.0089592 (0.0082782)	0.0114201 (0.0119141)	0.0015567 (0.012381)	0.0067947 (0.0042244)
hs#imidlow	0.0053961 (0.0098907)	0.0057943 (0.0103557)	0.0102809 (0.0102796)	0.0054807 (0.0147097)	0.0091004 (0.0153144)	0.0071697 (0.0051388)
hs#imidhigh	0.0149813 (0.0137156)	0.0103726 (0.0133179)	0.0087754 (0.0132869)	0.0047923 (0.0177916)	0.0174004 (0.0188689)	0.0111457* (0.0066495)
hs#ihigh	0.0000219 (0.0151844)	0.0034024 (0.0145035)	0.0194216 (0.0137281)	0.0020435 (0.0193858)	-0.0150417 (0.0192551)	0.0041398 (0.007103)
hs#uem	0.0035865 (0.0092292)	0.0149262 (0.0094727)	0.028259*** (0.0092276)	0.0300087** (0.0130217)	0.0055932 (0.0129073)	0.0163446*** (0.0046335)
bd#imidlow	0.0002409 (0.0131957)	-0.0006262 (0.0135607)	-0.022571* (0.0135108)	0.0302764 (0.0189486)	0.0192541 (0.0189138)	0.00066 (0.0067032)
bd#imidhigh	-0.005552 (0.0152605)	-0.0103429 (0.0154013)	-0.0155425 (0.0154664)	0.0069358 (0.0206551)	0.0113314 (0.0215131)	-0.0051778 (0.007623)

(Continued)

	2006	2007	2008	2009	2010	2006-2010
bd#ihigh	-0.0010115 (0.0142719)	0.0070411 (0.014017)	-0.001197 (0.0136038)	0.0271225 (0.0185219)	-0.0186541 (0.0187834)	0.0026103 (0.0068561)
bd#uem	-0.0282246** (0.0127363)	-0.0315125** (0.012918)	-0.0087665 (0.0128723)	-0.0040451 (0.017332)	-0.036483** (0.0168534)	-0.0221417*** (0.0063172)

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01. The values in brackets are the standard errors of the corresponding estimated coefficients.

(Continued)

Table 11b: The OLS Regression Results of the Interaction Terms from 2011-2016: Estimated Coefficients and Standard Deviations in the Brackets

	2011	2012	2013	2014	2015	2016	2011-2016
lhs#imidlow	0.0056993 (0.0107676)	0.0197309* (0.0116449)	-0.0034948 (0.012201)	-0.003678 (0.0132738)	-0.0084057 (0.0128156)	-0.0003808 (0.0117153)	0.0026946 (0.0049095)
lhs#imidhigh	-0.0039992 (0.0135411)	-0.0073516 (0.0133282)	0.018554 (0.0150008)	0.0110646 (0.0155818)	-0.0043136 (0.0149184)	-0.0121978 (0.0140761)	-0.0001643 (0.0058544)
lhs#ihigh	-0.031088** (0.015826)	-0.0061384 (0.0182147)	-0.0059814 (0.0186088)	-0.0413077** (0.0165727)	-0.0454816*** (0.0172612)	-0.03864** (0.0169599)	-0.0269211*** (0.0070403)
lhs#uem	-0.0000253 (0.0075499)	-0.0061445 (0.0082201)	0.0038782 (0.0092682)	0.0265829*** (0.0092734)	-0.0046697 (0.0094782)	-0.0097964 (0.0088954)	0.0012781 (0.0035454)

	2011	2012	2013	2014	2015	2016	2011-2016
hs#imidlow	0.0006483 (0.009882)	0.0031342 (0.010495)	-0.0178455* (0.0108506)	-0.0125975 (0.0115121)	-0.0013564 (0.0114953)	-0.0116655 (0.0102773)	-0.0063572 (0.0043796)
hs#imidhigh	-0.003758 (0.0102584)	0.0179013 (0.0115183)	0.0152114 (0.0118795)	-0.0026026 (0.0117008)	0.002809 (0.0116884)	-0.0182892* (0.0104275)	0.0016739 (0.0045843)
hs#ihigh	-0.0005184 (0.0113209)	-0.0009248 (0.0117361)	-0.0054683 (0.012051)	-0.0178892 (0.0116792)	0.0174166 (0.0119563)	-0.0164324 (0.0110793)	-0.0037829 (0.0047376)
hs#uem	0.0101732 (0.007879)	0.0112494 (0.008712)	-0.0065501 (0.009145)	0.0175935* (0.0093307)	0.0210258** (0.009394)	-0.0012745 (0.0084312)	0.0084725** (0.0035825)
bd#imidlow	-0.0012425 (0.0126256)	0.0119952 (0.0136435)	0.0131329 (0.014284)	-0.020921 (0.0145995)	0.002901 (0.0144969)	0.0163115 (0.0134626)	0.0034521 (0.0056405)
bd#imidhigh	-0.007716 (0.0120394)	0.0197245 (0.0131297)	0.0345314** (0.0135613)	0.0132664 (0.0136794)	0.0043039 (0.0134771)	0.0200827 (0.0125359)	0.0133072** (0.0053254)
bd#ihigh	0.0020736 (0.0112392)	-0.0025426 (0.0119079)	0.0205882* (0.0121741)	0.001201 (0.0120912)	0.0102153 (0.0120372)	0.0097272 (0.011076)	0.0068974 (0.0047854)
bd#uem	-0.0337141*** (0.0103615)	-0.0176892 (0.0114693)	-0.0426711*** (0.0117331)	0.0096717 (0.0119767)	-0.0116591 (0.0118189)	-0.0074909 (0.0112023)	-0.0174276*** (0.0046487)

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01. The values in brackets are the standard errors of the corresponding estimated coefficients.

(Continued)

# Appendix:

Table 1a: Robustness Check Results for 2006-10: Estimated Coefficients and Standard Deviations in the Brackets

Summer	0.1442459*** (0.0024804)	0.1443044*** (0.0024814)	0.1442201*** (0.0024835)	0.1442485*** (0.0024884)	0.1448981*** (0.0024943)	0.1448857*** (0.0024943)
Winter	-0.0156912*** (0.0021685)	-0.0158323*** (0.0021689)	-0.0157034*** (0.0021725)	-0.015676*** (0.0021764)	-0.0152951*** (0.0021816)	-0.0152911*** (0.0021816)
Summer	0.1442459*** (0.0024804)	0.1443044*** (0.0024814)	0.1442201*** (0.0024835)	0.1442485*** (0.0024884)	0.1448981*** (0.0024943)	0.1448857*** (0.0024943)
CCPI	0.0620943 (0.0400822)	0.0624743 (0.0400902)	0.0541875 (0.040125)	0.0528273 (0.0401942)	0.0666542* (0.0402931)	NA
Newfoundland and Labrador	-0.1007705*** (0.0044993)	-0.1000916*** (0.0045011)	-0.1046954*** (0.0045039)	-0.0799691*** (0.0034002)	NA	NA
Prince Edward Island	-0.1128282*** (0.0051741)	-0.1123124*** (0.0051762)	-0.1125644*** (0.0051818)	-0.1031436*** (0.004785)	NA	NA
Nova Scotia	-0.0699329*** (0.005122)	-0.0694317*** (0.0051233)	-0.0725686*** (0.0051277)	-0.0376431*** (0.0037981)	NA	NA

New Brunswick	-0.0542511*** (0.004566)	-0.0537925*** (0.0045679)	-0.0540984*** (0.0045754)	-0.0424694*** (0.0039001)	NA	NA
Quebec	-0.0620031*** (0.0035574)	-0.0624933*** (0.0035576)	-0.0631319*** (0.0035628)	-0.0177365*** (0.0024909)	NA	NA
Manitoba	0.0135818** (0.0054991)	0.0132568** (0.0055021)	0.014734*** (0.0055052)	-0.013803*** (0.0034673)	NA	NA
Saskatchewan	0.0947387*** (0.0058608)	0.0942576*** (0.0058645)	0.0954017*** (0.0058766)	0.0928283*** (0.0039692)	NA	NA
Alberta	0.0437359*** (0.0047415)	0.0434031*** (0.0047438)	0.0477712*** (0.0047446)	0.0181399*** (0.0031871)	NA	NA
British Columbia	-0.0478294*** (0.0043166)	-0.0479238*** (0.0043182)	-0.0480851*** (0.0043189)	-0.0522355*** (0.0029002)	NA	NA
Allother	0.0600259*** (0.0045376)	0.0599475*** (0.0045367)	0.0581154*** (0.0045371)	NA	NA	NA
StJohns	0.0934058*** (0.0077077)	0.0933323*** (0.0077071)	0.098919*** (0.0077097)	NA	NA	NA
Halifax	0.1129827*** (0.008301)	0.1132907*** (0.0083028)	0.1166498*** (0.0083077)	NA	NA	NA
SaintJohn	0.0753156*** (0.0116008)	0.0749769*** (0.0115994)	0.0737975*** (0.0115995)	NA	NA	NA

(Continued)

Saguenay	0.1100486*** (0.0093738)	0.1101792*** (0.0093708)	0.1088984*** (0.0093733)	NA	NA	NA
Quebec	0.1647885*** (0.0093439)	0.1652077*** (0.0093415)	0.1664705*** (0.0093591)	NA	NA	NA
Sherbrooke	0.1537431*** (0.0087905)	0.1541294*** (0.0087935)	0.1559954*** (0.0088069)	NA	NA	NA
Trois-Rivières	0.1231477*** (0.0094)	0.1230571*** (0.0094001)	0.1236038*** (0.0094162)	NA	NA	NA
Montreal	0.0826919*** (0.0064717)	0.0827796*** (0.0064706)	0.0853415*** (0.0064775)	NA	NA	NA
Ottawa	0.1389913*** (0.0064582)	0.1393852*** (0.006457)	0.1412682*** (0.0064616)	NA	NA	NA
Oshawa	0.0594787*** (0.0088481)	0.0596563*** (0.0088481)	0.0581089*** (0.0088537)	NA	NA	NA
Hamilton	0.0181356** (0.0080094)	0.0179366** (0.0080086)	0.017705** (0.0080147)	NA	NA	NA
StCatharines	-0.0135579* (0.0074656)	-0.013226* (0.0074667)	-0.0151708** (0.0074693)	NA	NA	NA
Kitchener	0.0843514*** (0.0087366)	0.0840111*** (0.0087409)	0.0859147*** (0.0087516)	NA	NA	NA

(Continued)

London	0.0812235*** (0.0079374)	0.0812124*** (0.0079375)	0.0820761*** (0.007945)	NA	NA	NA
Windsor	0.0042872 (0.008293)	0.0045373 (0.0082933)	0.0046605 (0.0082939)	NA	NA	NA
Sudbury	0.1076537*** (0.0088355)	0.1078317*** (0.0088335)	0.1073847*** (0.008829)	NA	NA	NA
Thunder	-0.0022139 (0.0081085)	-0.0023612 (0.0081069)	-0.0033081 (0.0081077)	NA	NA	NA
Winnipeg	-0.0099375 (0.0076997)	-0.0100753 (0.0077018)	-0.0096152 (0.0077057)	NA	NA	NA
Regina	0.0163919* (0.0097641)	0.0170616* (0.009767)	0.0186323* (0.0097778)	NA	NA	NA
Saskatoon	0.0470702*** (0.009959)	0.047608*** (0.0099619)	0.0518833*** (0.0099785)	NA	NA	NA
Calgary	0.0079108 (0.0081317)	0.0075203 (0.0081333)	0.0067466 (0.0081363)	NA	NA	NA
Edmonton	-0.0480682*** (0.007871)	-0.0482009*** (0.0078729)	-0.0487291*** (0.0078809)	NA	NA	NA
Vancouver	0.0066044 (0.0068582)	0.0060717 (0.0068593)	0.0056295 (0.0068587)	NA	NA	NA

(Continued)

Victoria	0.08858*** (0.0086201)	0.0889441*** (0.0086217)	0.0882727*** (0.0086287)	NA	NA	NA
Twenties	0.065451*** (0.0034032)	0.0655684*** (0.0034045)	NA	NA	NA	NA
Thirties	0.0520285*** (0.0025227)	0.0526815*** (0.0025229)	NA	NA	NA	NA
Forties	0.013973*** (0.0023033)	0.0142693*** (0.0023036)	NA	NA	NA	NA
Sixties	-0.0072979*** (0.0023394)	-0.0072049*** (0.0023401)	NA	NA	NA	NA
Male	-0.0252749*** (0.0016564)	NA	NA	NA	NA	NA
Constant	0.2300937*** (0.0042872)	0.2181362*** (0.0042145)	0.2368524*** (0.0039763)	0.2854956*** (0.0021402)	0.2720149*** (0.0016126)	0.2713448*** (0.0015596)
Number of Observations	477,297	477,297	477,297	477,297	477,297	477,297
R-squared	0.0234	0.0229	0.0209	0.0173	0.0125	0.0125
F-Statistic	228.86	229.7	230.92	549.95	1226.68	1634.96
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01.

(Continued)

Table 1b: Robustness Check Results for 2006-10: Estimated Coefficients and Standard Deviations in the Brackets

Summer	0.1459306*** (0.0024095)	0.1458785*** (0.0024095)	0.1460869*** (0.0024096)	0.145882*** (0.0024105)	0.1437281*** (0.0024381)	0.1438307*** (0.0024415)
Fall	0.0042545** (0.0021629)	0.0042872** (0.002163)	0.0043635** (0.0021648)	0.0044073** (0.002166)	0.0024575 (0.0021862)	0.0022632 (0.0021885)
Winter	-0.0133891*** (0.0021155)	-0.0133221*** (0.0021157)	-0.0132543*** (0.002117)	-0.01335*** (0.0021184)	-0.0146182*** (0.0021355)	-0.0158019*** (0.0021373)
CCPI	-0.0406682 (0.0390193)	-0.0411506 (0.0390219)	-0.0389819 (0.0390385)	-0.0286327 (0.0390577)	0.0327352 (0.0394444)	0.04593 (0.0394868)
Newfoundland and Labrador	-0.0374605*** (0.0044059)	-0.0362527*** (0.0044022)	-0.0360072*** (0.0044016)	-0.0392425*** (0.0043967)	-0.0578275*** (0.0044296)	-0.0689557*** (0.0044242)
Prince Edward Island	-0.0870486*** (0.0050329)	-0.0869304*** (0.0050339)	-0.0874804*** (0.0050349)	-0.088512*** (0.0050349)	-0.1112863*** (0.0050807)	-0.1109927*** (0.0050822)
Nova Scotia	-0.0299089*** (0.0049622)	-0.0296101*** (0.0049625)	-0.0296142*** (0.0049637)	-0.0310456*** (0.0049651)	-0.0561681*** (0.0050107)	-0.0602915*** (0.0050133)
New Brunswick	-0.0246806*** (0.0044164)	-0.0243072*** (0.004415)	-0.0236021*** (0.0044153)	-0.0246186*** (0.0044158)	-0.046091*** (0.00446)	-0.0481757*** (0.0044642)
Quebec	-0.0189101*** (0.003476)	-0.0185486*** (0.0034764)	-0.0179997*** (0.0034757)	-0.017425*** (0.0034779)	-0.0378927*** (0.0035011)	-0.0392996*** (0.0035049)

(Continued)

Manitoba	0.0349598*** (0.005371)	0.0344855*** (0.0053704)	0.0333954*** (0.0053688)	0.0347254*** (0.0053675)	0.0279134*** (0.0054077)	0.0324125*** (0.0054086)
Saskatchewan	0.1037231*** (0.005723)	0.1030091*** (0.005723)	0.1020692*** (0.0057238)	0.1047612*** (0.0057241)	0.1045293*** (0.0057705)	0.1096451*** (0.0057745)
Alberta	0.0261865*** (0.0046436)	0.0253467*** (0.0046387)	0.0258639*** (0.0046382)	0.0293624*** (0.0046375)	0.0498849*** (0.0046753)	0.0546517*** (0.0046747)
British Columbia	-0.0416166*** (0.0042241)	-0.0418793*** (0.0042231)	-0.0419375*** (0.0042237)	-0.0401402*** (0.0042237)	-0.0450124*** (0.004261)	-0.044346*** (0.0042635)
Allother	0.1023851*** (0.0044218)	0.1022463*** (0.0044211)	0.1022324*** (0.0044257)	0.1054236*** (0.0044212)	0.1022159*** (0.0044854)	0.1017886*** (0.0044934)
StJohns	0.0527212*** (0.0075245)	0.0519448*** (0.0075233)	0.0532865*** (0.0075254)	0.0589075*** (0.0075206)	0.072538*** (0.0075969)	0.080266*** (0.0076046)
Halifax	0.0943527*** (0.0080592)	0.0940659*** (0.0080594)	0.0956745*** (0.0080655)	0.101673*** (0.008065)	0.1144229*** (0.0081576)	0.1186738*** (0.0081669)
SaintJohn	0.0843811*** (0.0112207)	0.0840739*** (0.0112234)	0.0830208*** (0.0112322)	0.0869096*** (0.011231)	0.0994141*** (0.0113812)	0.1008519*** (0.0113921)
Saguenay	0.1206814*** (0.0091456)	0.120727*** (0.0091439)	0.1214959*** (0.0091455)	0.1251932*** (0.0091406)	0.1284243*** (0.0092335)	0.1255449*** (0.0092371)
Quebec	0.1462502*** (0.0091191)	0.1458264*** (0.0091186)	0.147854*** (0.0091225)	0.1527931*** (0.0091258)	0.1574164*** (0.0092047)	0.159506*** (0.0092159)

(Continued)

Sherbrooke	0.1598749***	0.159475***	0.1601681***	0.1654873***	0.1575298***	0.1572297***
	(0.0085263)	(0.0085274)	(0.0085334)	(0.0085291)	(0.008611)	(0.0086213)
Trois-Rivières	0.1362969***	0.1360878***	0.1372381***	0.1429265***	0.1373121***	0.1348134***
	(0.0091471)	(0.009148)	(0.0091481)	(0.00915)	(0.0092438)	(0.0092532)
Montreal	0.0733696***	0.0729449***	0.0739429***	0.0781127***	0.0777846***	0.0783846***
	(0.0062931)	(0.0062932)	(0.0062985)	(0.0063011)	(0.0063716)	(0.0063844)
Ottawa	0.1054314***	0.1055392***	0.1065995***	0.1118972***	0.1291097***	0.1309731***
	(0.0062579)	(0.0062575)	(0.0062631)	(0.0062629)	(0.0063356)	(0.0063464)
Oshawa	0.0780106***	0.0781027***	0.0771552***	0.0802467***	0.1012617***	0.1012327***
	(0.0086203)	(0.0086213)	(0.0086237)	(0.008625)	(0.0087262)	(0.0087479)
Hamilton	0.0395315***	0.0394443***	0.0395399***	0.0430027***	0.0473062***	0.0466372***
	(0.0077885)	(0.0077881)	(0.0077953)	(0.0078036)	(0.0079098)	(0.0079198)
StCatharines	0.0342296***	0.0341059***	0.0339884***	0.0366865***	0.0250072***	0.0236492***
	(0.00728)	(0.0072799)	(0.0072851)	(0.0072828)	(0.0073609)	(0.0073677)
Kitchener	0.1057769***	0.1053037***	0.1059936***	0.1085913***	0.1082966***	0.1095325***
	(0.008468)	(0.0084691)	(0.0084798)	(0.0084904)	(0.0085947)	(0.0086116)
London	0.1093229***	0.1092263***	0.1101497***	0.1148733***	0.1063222***	0.1054466***
	(0.0076979)	(0.007698)	(0.0077073)	(0.0077107)	(0.0078145)	(0.0078318)
Windsor	0.0360897***	0.0363645***	0.0360876***	0.0399816***	0.0389841***	0.0345786***
	(0.0080421)	(0.0080454)	(0.008053)	(0.0080618)	(0.0081489)	(0.0081665)

(Continued)

Sudbury	0.138824***	0.1387953***	0.1400014***	0.1458882***	0.1472925***	0.1447292***
	(0.0085429)	(0.0085415)	(0.0085508)	(0.0085525)	(0.0086689)	(0.0086843)
Thunder	0.037203***	0.0373097***	0.0379194***	0.0425631***	0.0350691***	0.0327887***
	(0.0079491)	(0.0079504)	(0.0079507)	(0.0079485)	(0.0080321)	(0.0080492)
Winnipeg	0.004467	0.0049603	0.0068731	0.0089525	0.0001832	-0.0020763
	(0.0074959)	(0.007495)	(0.007498)	(0.0075026)	(0.0075858)	(0.0075943)
Regina	0.0233556**	0.0240099**	0.0260546***	0.0292922***	0.0279662***	0.026028***
	(0.0095185)	(0.0095183)	(0.0095237)	(0.0095246)	(0.0096297)	(0.0096446)
Saskatoon	0.053922***	0.0543798***	0.0564686***	0.058852***	0.0505263***	0.0476119***
	(0.0097423)	(0.009742)	(0.0097485)	(0.0097491)	(0.0098351)	(0.0098452)
Calgary	0.0134891*	0.0142329*	0.0165026**	0.0188427**	0.0078008	0.0066434
	(0.0079187)	(0.007915)	(0.0079199)	(0.0079228)	(0.0080304)	(0.0080396)
Edmonton	-0.0044545	-0.0039148	-0.0030159	-0.0007963	-0.0244308***	-0.0278137***
	(0.0076722)	(0.0076698)	(0.007673)	(0.0076777)	(0.0077678)	(0.0077765)
Vancouver	0.0182247***	0.0182229***	0.0204151***	0.0218987***	0.015785**	0.0138607**
	(0.0066837)	(0.0066836)	(0.0066852)	(0.0066939)	(0.0067818)	(0.0067912)
Victoria	0.097813***	0.0977702***	0.1003314***	0.1049136***	0.093828***	0.0940521***
	(0.0084413)	(0.00844)	(0.0084451)	(0.0084443)	(0.0085225)	(0.0085324)
Twenties	0.1281119***	0.1278123***	0.128471***	0.1165029***	0.0949133***	0.0883712***
	(0.0033795)	(0.0033807)	(0.0033833)	(0.003351)	(0.0033685)	(0.0033675)

(Continued)

Thirties	0.0537919*** (0.0025217)	0.0538211*** (0.0025221)	0.0473076*** (0.0024795)	0.0496907*** (0.0024646)	0.0265338*** (0.0024854)	0.0261313*** (0.0024897)
Forties	0.0079762*** (0.0023559)	0.0079956*** (0.0023559)	-0.0046756** (0.0022516)	-0.000896 (0.0022411)	-0.0064939*** (0.0022716)	-0.0052825** (0.0022762)
Sixties	0.0174148*** (0.0023441)	0.0170768*** (0.0023438)	0.0273202*** (0.0023041)	0.0294052*** (0.0023008)	0.0176213*** (0.0023316)	0.001768 (0.0023118)
Male	-0.0369924*** (0.0016364)	-0.0372996*** (0.0016344)	-0.0341976*** (0.0016229)	-0.0342911*** (0.0016233)	-0.0227856*** (0.0016383)	-0.0175325*** (0.0016334)
LHS	-0.1109207*** (0.0031804)	-0.1119416*** (0.0020428)	-0.1122338*** (0.0020424)	-0.1151263*** (0.0020387)	-0.1490482*** (0.0020365)	-0.1632813*** (0.0019979)
HS	-0.057949*** (0.0031358)	-0.0497945*** (0.0020658)	-0.0494756*** (0.0020663)	-0.0523466*** (0.002063)	-0.0614501*** (0.0020842)	-0.0644395*** (0.002085)
BD	0.1226711*** (0.0046485)	0.1193575*** (0.0025707)	0.1203695*** (0.0025727)	0.1237355*** (0.002575)	0.163403*** (0.002559)	0.1666505*** (0.0025607)
Unemployment	-0.0297641*** (0.0028395)	-0.0279307*** (0.0018412)	-0.0289772*** (0.0018398)	-0.0307272*** (0.0018418)	-0.0671086*** (0.0018103)	NA
Imidlow	0.0950635*** (0.0030906)	0.095424*** (0.0021694)	0.0951859*** (0.0021698)	0.0846058*** (0.0020769)	NA	NA
Imidhigh	0.1520118*** (0.0038991)	0.152477*** (0.0028029)	0.1509013*** (0.002801)	0.1353897*** (0.0026803)	NA	NA

(Continued)

Ihigh	0.252424*** (0.0040151)	0.2518696*** (0.0028442)	0.2491901*** (0.0028386)	0.2285968*** (0.0026785)	NA	NA
One Adult	0.0164329*** (0.0019571)	0.0165485*** (0.0019546)	0.0239773*** (0.0019255)	NA	NA	NA
Three Adults	-0.0315084*** (0.0028055)	-0.0317875*** (0.0028026)	-0.0314827*** (0.0027931)	NA	NA	NA
Four Adults	-0.054943*** (0.0047346)	-0.0553816*** (0.0047304)	-0.0524286*** (0.0047302)	NA	NA	NA
Five Adults	-0.0755526*** (0.009449)	-0.0764224*** (0.0094431)	-0.0740762*** (0.0094553)	NA	NA	NA
One Child	-0.0418169*** (0.0023453)	-0.0418308*** (0.0023453)	NA	NA	NA	NA
Two Children	-0.0352871*** (0.0025683)	-0.035053*** (0.002567)	NA	NA	NA	NA
Three Children	-0.0381207*** (0.0040434)	-0.0378595*** (0.0040432)	NA	NA	NA	NA
Four Children	-0.0551084*** (0.0064744)	-0.055085*** (0.0064737)	NA	NA	NA	NA
Ihs#imidlow	-0.006063 (0.0054842)	NA	NA	NA	NA	NA

(Continued)

lhs#imidhigh	0.0017982 (0.0086604)	NA	NA	NA	NA	NA
lhs#ihigh	-0.0492606*** (0.0100699)	NA	NA	NA	NA	NA
lhs#uem	0.0067947 (0.0042244)	NA	NA	NA	NA	NA
hs#imidlow	0.0071697 (0.0051388)	NA	NA	NA	NA	NA
hs#imidhigh	0.0111457* (0.0066495)	NA	NA	NA	NA	NA
hs#ihigh	0.0041398 (0.007103)	NA	NA	NA	NA	NA
hs#uem	0.0163446*** (0.0046335)	NA	NA	NA	NA	NA
bd#imidlow	0.00066 (0.0067032)	NA	NA	NA	NA	NA
bd#imidhigh	-0.0051778 (0.007623)	NA	NA	NA	NA	NA
bd#ihigh	0.0026103 (0.0068561)	NA	NA	NA	NA	NA

(Continued)

bd#uem	-0.0221417*** (0.0063172)	NA	NA	NA	NA	NA
Constant	0.118662*** (0.0047727)	0.1184359*** (0.0046394)	0.1022332*** (0.0045687)	0.1084622*** (0.0044184)	0.2131759*** (0.0043779)	0.2000703*** (0.0043634)
Number of Observations	477,297	477,297	477,297	477,297	477,297	477,297
R-squared	0.075	0.0749	0.0741	0.0731	0.0544	0.0522
F-Statistic	523.63	610.62	650.86	696.19	566.2	545.53
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
bd#uem	-0.0221417*** (0.0063172)	NA	NA	NA	NA	NA
Constant	0.118662*** (0.0047727)	0.1184359*** (0.0046394)	0.1022332*** (0.0045687)	0.1084622*** (0.0044184)	0.2131759*** (0.0043779)	0.2000703*** (0.0043634)

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01.

(Continued)

Table 1c: Robustness Check Results for 2011-16: Estimated Coefficients and Standard Deviations in the Brackets

Summer	0.1387437*** (0.0019996)	0.138723*** (0.0020004)	0.1384877*** (0.0020025)	0.1383945*** (0.0020078)	0.1383891*** (0.0020109)	0.1383898*** (0.0020109)
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Fall	0.016811*** (0.0017376)	0.0167675*** (0.0017378)	0.016835*** (0.001739)	0.0170737*** (0.0017445)	0.017238*** (0.0017468)	0.0172374*** (0.0017468)
Winter	0.0036193** (0.0016771)	0.0035331** (0.0016773)	0.0038196** (0.0016806)	0.0037987** (0.0016859)	0.0038982** (0.001689)	0.0038773** (0.0016888)
CCPI	0.027361 (0.053738)	0.0266781 (0.0537545)	0.0179632 (0.0538207)	0.0289338 (0.0539273)	0.0349462 (0.0539998)	NA
Newfoundland and Labrador	-0.0295396*** (0.0042563)	-0.0288191*** (0.0042574)	-0.0323624*** (0.0042617)	-0.0215027*** (0.0030035)	NA	NA
Prince Edward Island	-0.0570782*** (0.0043683)	-0.0566111*** (0.0043681)	-0.0562578*** (0.0043753)	-0.0518061*** (0.0038341)	NA	NA
Nova Scotia	-0.0231187*** (0.004274)	-0.0225789*** (0.0042761)	-0.0250996*** (0.0042794)	-0.0038131 (0.0030229)	NA	NA
New Brunswick	-0.0297671*** (0.004164)	-0.0293366*** (0.0041647)	-0.0307375*** (0.0041705)	-0.0188884*** (0.0030946)	NA	NA
Quebec	-0.0267183*** (0.003144)	-0.0271709*** (0.0031445)	-0.0272382*** (0.0031488)	-0.0033444* (0.0019928)	NA	NA
Manitoba	0.0245557*** (0.0044798)	0.0244669*** (0.0044819)	0.0290744*** (0.0044817)	-0.0309154*** (0.0024289)	NA	NA
Saskatchewan	0.0946708*** (0.0047506)	0.0943008*** (0.004754)	0.0973105*** (0.00476)	0.0886011*** (0.0030999)	NA	NA

(Continued)

Alberta	0.0536124*** (0.0040735)	0.0530752*** (0.0040751)	0.0579194*** (0.0040762)	0.0212249*** (0.0025255)	NA	NA
British Columbia	0.0302062*** (0.0043111)	0.0300561*** (0.0043125)	0.0302942*** (0.0043131)	-0.0197529*** (0.0023634)	NA	NA
Allother	0.0627177*** (0.0038379)	0.0628064*** (0.0038375)	0.0589531*** (0.0038372)	NA	NA	NA
StJohns	0.0711019*** (0.0067115)	0.0706899*** (0.0067125)	0.0753373*** (0.0067167)	NA	NA	NA
Halifax	0.0964472*** (0.0067362)	0.0965418*** (0.0067379)	0.0987522*** (0.0067408)	NA	NA	NA
Moncton	0.0939029*** (0.008596)	0.0938155*** (0.0085973)	0.0945939*** (0.0086163)	NA	NA	NA
SaintJohn	0.0698971*** (0.008997)	0.0698792*** (0.008998)	0.0687305*** (0.0090059)	NA	NA	NA
Saguenay	0.1209829*** (0.0077809)	0.1208082*** (0.0077829)	0.1189414*** (0.0077883)	NA	NA	NA
Quebec	0.1282496*** (0.0071355)	0.1286785*** (0.0071357)	0.1295619*** (0.0071497)	NA	NA	NA
Sherbrooke	0.1223068*** (0.007111)	0.1226308*** (0.0071114)	0.122221*** (0.007129)	NA	NA	NA

(Continued)

Trois-Rivières	0.1019768*** (0.0076211)	0.1023877*** (0.0076208)	0.1015954*** (0.0076344)	NA	NA	NA
Montreal	0.0456368*** (0.0051971)	0.0457911*** (0.0051967)	0.0472381*** (0.005204)	NA	NA	NA
Ottawa	0.1123773*** (0.0051525)	0.1127389*** (0.0051519)	0.1131893*** (0.0051585)	NA	NA	NA
Kingston	0.1294679*** (0.0070888)	0.12978*** (0.0070904)	0.1277758*** (0.0071047)	NA	NA	NA
Peterborough	0.1260576*** (0.0135938)	0.1270262*** (0.0135992)	0.1247493*** (0.0136211)	NA	NA	NA
Oshawa	0.0673262*** (0.0070091)	0.0672347*** (0.0070094)	0.0659812*** (0.007023)	NA	NA	NA
Hamilton	0.0272785*** (0.0063744)	0.0271396*** (0.0063761)	0.0255286*** (0.006386)	NA	NA	NA
StCatharines	0.006212 (0.0060547)	0.0066519 (0.0060556)	0.0030466 (0.0060555)	NA	NA	NA
Kitchener	0.0826397*** (0.0070166)	0.0825172*** (0.007015)	0.08391*** (0.0070377)	NA	NA	NA
Brantford	0.01301 (0.0079485)	0.0132702* (0.0079506)	0.010501 (0.0079675)	NA	NA	NA

(Continued)

Guelph	0.1436166*** (0.0103106)	0.1438078*** (0.0103173)	0.1460208*** (0.0103503)	NA	NA	NA
London	0.0751851*** (0.0066292)	0.0755484*** (0.0066296)	0.0745703*** (0.0066452)	NA	NA	NA
Windsor	-0.0113482* (0.0063595)	-0.0116345* (0.0063559)	-0.0140115** (0.0063617)	NA	NA	NA
Barrie	0.1142727*** (0.0125494)	0.1143982*** (0.0125455)	0.1138293*** (0.0125883)	NA	NA	NA
Sudbury	0.1269018*** (0.0071055)	0.1269773*** (0.0071042)	0.1267084*** (0.0071131)	NA	NA	NA
Thunder	-0.0094493 (0.0061098)	-0.0090905 (0.0061093)	-0.0135253** (0.0061052)	NA	NA	NA
Winnipeg	-0.0436901*** (0.005824)	-0.0436841*** (0.0058248)	-0.0461302*** (0.005826)	NA	NA	NA
Regina	0.022074*** (0.0076602)	0.0224729*** (0.0076651)	0.0225975*** (0.0076741)	NA	NA	NA
Saskatoon	0.0421868*** (0.0079484)	0.0423375*** (0.0079527)	0.0441603*** (0.0079639)	NA	NA	NA
Calgary	-0.007672 (0.0065661)	-0.0077193 (0.0065664)	-0.0105065 (0.0065682)	NA	NA	NA

(Continued)

Edmonton	-0.0355531*** (0.0062301)	-0.0352019*** (0.0062306)	-0.0368235*** (0.0062355)	NA	NA	NA
Kelowna	0.0416628*** (0.011938)	0.041644*** (0.0119385)	0.0387061*** (0.0119503)	NA	NA	NA
Abbotsford	-0.0504961*** (0.0074271)	-0.0502578*** (0.0074276)	-0.0519733*** (0.0074167)	NA	NA	NA
Vancouver	-0.0610537*** (0.0059215)	-0.0611412*** (0.0059219)	-0.0614946*** (0.0059236)	NA	NA	NA
Victoria	0.043917*** (0.0075034)	0.0443739*** (0.0075041)	0.042339*** (0.0075092)	NA	NA	NA
Twenties	0.0651063*** (0.0027966)	0.0649452*** (0.0027973)	NA	NA	NA	NA
Thirties	0.0471699*** (0.0020041)	0.0475441*** (0.0020046)	NA	NA	NA	NA
Forties	0.0268907*** (0.0019181)	0.0272005*** (0.0019181)	NA	NA	NA	NA
Sixties	-0.0095602*** (0.001771)	-0.0095244*** (0.0017715)	NA	NA	NA	NA
Male	-0.0219519*** (0.0013093)	NA	NA	NA	NA	NA

(Continued)

Constant	0.1347364*** (0.0033966)	0.1243622*** (0.0033432)	0.1437294*** (0.0031554)	0.1983209*** (0.0017869)	0.1978467*** (0.0013531)	0.1985884*** (0.0018692)
Number of Observations	604,866	604,866	604,866	604,866	604,866	604,866
R-squared	0.024	0.0235	0.0211	0.0153	0.012	0.012
F-Statistic	253.01	254.41	246.66	572.71	1437.63	1916.7
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01.

(Continued)

Table 1d: Robustness Check Results for 2011-16: Estimated Coefficients and Standard Deviations in the Brackets

Summer	0.1391126*** (0.0019612)	0.1391184*** (0.0019613)	0.139086*** (0.0019613)	0.1391096*** (0.0019624)	0.1387575*** (0.0019774)	0.1386417*** (0.0019793)
Fall	0.0168102*** (0.0017096)	0.0169178*** (0.0017095)	0.0168687*** (0.0017103)	0.0169369*** (0.0017111)	0.0161655*** (0.0017203)	0.0158302*** (0.0017215)
Winter	0.0048176*** (0.001652)	0.0049226*** (0.001652)	0.0048955*** (0.0016525)	0.0049757*** (0.0016538)	0.0048507*** (0.0016611)	0.0040173** (0.0016621)
CCPI	-0.1503565*** (0.0528203)	-0.150149*** (0.0528221)	-0.149259*** (0.0528353)	-0.1407036*** (0.0528674)	-0.045713 (0.0531938)	-0.0461744 (0.0532377)

Newfoundland and Labrador	0.0011319 (0.0041723)	0.0018183 (0.004171)	0.0023112 (0.0041686)	0.0005527 (0.0041671)	-0.0062737 (0.0041933)	-0.0127191*** (0.0041938)
Prince Edward Island	-0.0560386*** (0.0042875)	-0.0559182*** (0.0042878)	-0.05595*** (0.0042873)	-0.0566858*** (0.0042871)	-0.0668419*** (0.0043127)	-0.0660431*** (0.004314)
Nova Scotia	-0.0068799* (0.0041838)	-0.0066108 (0.0041843)	-0.0063767 (0.0041836)	-0.0074691** (0.0041841)	-0.0209668*** (0.0042119)	-0.0235719*** (0.0042155)
New Brunswick	-0.0114017*** (0.0040604)	-0.0110166*** (0.0040604)	-0.0106607*** (0.0040599)	-0.011583*** (0.0040606)	-0.0252043*** (0.0040897)	-0.0269305*** (0.0040929)
Quebec	-0.0077442** (0.0030971)	-0.0075677** (0.0030972)	-0.0073237** (0.0030969)	-0.006376** (0.0030973)	-0.0169558*** (0.0031116)	-0.016478*** (0.0031142)
Manitoba	0.0323778*** (0.0044038)	0.0320612*** (0.0044033)	0.0307482*** (0.0044022)	0.0314367*** (0.0044048)	0.0307338*** (0.0044278)	0.0338029*** (0.0044303)
Saskatchewan	0.0879743*** (0.0046703)	0.0874291*** (0.0046687)	0.0866437*** (0.004669)	0.089634*** (0.0046696)	0.0956708*** (0.0046989)	0.0994792*** (0.0046998)
Alberta	0.0345094*** (0.0040219)	0.0337951*** (0.0040181)	0.0338309*** (0.0040179)	0.0365477*** (0.004018)	0.0546867*** (0.0040355)	0.0577282*** (0.0040367)
British Columbia	0.0267307*** (0.0042355)	0.0264316*** (0.0042343)	0.0266511*** (0.0042346)	0.0282421*** (0.0042352)	0.0276629*** (0.0042644)	0.0280512*** (0.0042689)
All other	0.0959778*** (0.0038219)	0.0960777*** (0.0038217)	0.0960047*** (0.0038226)	0.0999188*** (0.0038195)	0.1011464*** (0.0038443)	0.1013846*** (0.0038488)

(Continued)

StJohns	0.0414134*** (0.0066074)	0.0410637*** (0.006607)	0.0412365*** (0.0066082)	0.0473026*** (0.006605)	0.0616857*** (0.0066461)	0.0681631*** (0.00665)
Halifax	0.0804786*** (0.0066274)	0.0802512*** (0.0066274)	0.0814242*** (0.0066273)	0.0876448*** (0.006626)	0.0988327*** (0.0066712)	0.1024625*** (0.006675)
Moncton	0.10382*** (0.0084561)	0.1034769*** (0.0084557)	0.1038483*** (0.0084579)	0.1093797*** (0.0084584)	0.1138793*** (0.008516)	0.1175032*** (0.008517)
SaintJohn	0.078852*** (0.0087934)	0.078913*** (0.0087944)	0.07834*** (0.0087945)	0.0836155*** (0.0087946)	0.0937843*** (0.0088538)	0.0959911*** (0.0088619)
Saguenay	0.1336382*** (0.0076464)	0.1338351*** (0.0076458)	0.1342152*** (0.0076439)	0.1384749*** (0.0076441)	0.1436231*** (0.0077038)	0.1415008*** (0.0077111)
Quebec	0.116217*** (0.0070335)	0.1162675*** (0.0070337)	0.1170335*** (0.0070357)	0.122293*** (0.0070383)	0.1289994*** (0.0070654)	0.1311889*** (0.0070707)
Sherbrooke	0.1347995*** (0.0069926)	0.1345765*** (0.0069921)	0.1347794*** (0.0069945)	0.1401348*** (0.0069938)	0.1346757*** (0.007022)	0.1347699*** (0.0070283)
Trois-Rivières	0.1176081*** (0.0074874)	0.117544*** (0.0074868)	0.1182121*** (0.007489)	0.1237252*** (0.0074911)	0.1208922*** (0.0075418)	0.1193082*** (0.0075451)
Montreal	0.0447682*** (0.0051265)	0.0444837*** (0.0051262)	0.0449875*** (0.0051278)	0.0488088*** (0.0051302)	0.048359*** (0.0051619)	0.0483558*** (0.0051674)
Ottawa	0.0904042*** (0.0050793)	0.0905404*** (0.0050798)	0.0910095*** (0.005082)	0.0962345*** (0.005082)	0.1099263*** (0.0051094)	0.110466*** (0.0051166)

(Continued)

Kingston	0.1349796*** (0.0069557)	0.1351019*** (0.0069536)	0.1354698*** (0.0069569)	0.1398445*** (0.0069596)	0.1425528*** (0.0069916)	0.1423308*** (0.0069999)
Peterborough	0.1501355*** (0.0132949)	0.1503076*** (0.0133012)	0.150588*** (0.0133136)	0.1541413*** (0.0133265)	0.14879*** (0.0134257)	0.1474395*** (0.0134277)
Oshawa	0.0798454*** (0.0069304)	0.0798787*** (0.0069301)	0.0795196*** (0.0069323)	0.0824002*** (0.0069299)	0.0965664*** (0.0069669)	0.0980748*** (0.0069753)
Hamilton	0.035516*** (0.0062893)	0.03556*** (0.0062891)	0.0353684*** (0.0062931)	0.0380555*** (0.0063008)	0.0440374*** (0.006334)	0.0448064*** (0.0063359)
StCatharines	0.0382771*** (0.0060077)	0.0383094*** (0.0060083)	0.0382715*** (0.0060085)	0.041684*** (0.006007)	0.036155*** (0.0060383)	0.0358758*** (0.0060421)
Kitchener	0.0925086*** (0.0069172)	0.0924183*** (0.0069173)	0.0923635*** (0.0069243)	0.0953155*** (0.0069291)	0.0996866*** (0.0069582)	0.1021513*** (0.0069655)
Brantford	0.0468174*** (0.0078601)	0.0468459*** (0.0078603)	0.0463631*** (0.0078641)	0.0493307*** (0.0078662)	0.04932*** (0.0078914)	0.0510746*** (0.0078929)
Guelph	0.1390241*** (0.0101913)	0.1389501*** (0.0101918)	0.1396008*** (0.010198)	0.1443041*** (0.0102093)	0.1486259*** (0.0101989)	0.1505171*** (0.0102138)
London	0.0999511*** (0.0065116)	0.0999673*** (0.0065113)	0.100113*** (0.006516)	0.1041203*** (0.006516)	0.0990333*** (0.0065643)	0.0982026*** (0.0065726)
Windsor	0.0211498*** (0.0063138)	0.021351*** (0.0063129)	0.0206907*** (0.0063149)	0.0236596*** (0.0063127)	0.019395*** (0.0063297)	0.0165558*** (0.0063366)

(Continued)

Barrie	0.1276163*** (0.0123866)	0.1273442*** (0.0123888)	0.1266363*** (0.0123877)	0.1273854*** (0.0124068)	0.1391907*** (0.012419)	0.1408234*** (0.0124307)
Sudbury	0.1506945*** (0.0069748)	0.1508534*** (0.006976)	0.1509873*** (0.0069758)	0.1567292*** (0.0069712)	0.1595829*** (0.0070292)	0.158787*** (0.00704)
Thunder	0.0075732 (0.0060571)	0.0076819 (0.0060561)	0.0081186 (0.0060535)	0.0126644** (0.0060577)	0.0150768** (0.006081)	0.0147997** (0.0060834)
Winnipeg	-0.0227184*** (0.0057412)	-0.0224414*** (0.0057402)	-0.0210471*** (0.0057404)	-0.0194559*** (0.0057468)	-0.0287255*** (0.0057813)	-0.0302464*** (0.0057864)
Regina	0.0204531*** (0.0075459)	0.0209348*** (0.0075455)	0.0224433*** (0.0075462)	0.0255082*** (0.00755)	0.0332252*** (0.0075968)	0.032897*** (0.0076023)
Saskatoon	0.0545558*** (0.0078373)	0.0548261*** (0.0078366)	0.056315*** (0.0078381)	0.0587439*** (0.0078424)	0.0566909*** (0.0078946)	0.0547287*** (0.0079006)
Calgary	0.0034794 (0.0064692)	0.0040702 (0.0064671)	0.005179 (0.0064675)	0.0067211 (0.0064713)	-0.0003486 (0.006524)	-0.0012987 (0.0065296)
Edmonton	-0.0068519 (0.0061541)	-0.0064996 (0.0061538)	-0.0053608 (0.0061546)	-0.0024659 (0.006157)	-0.0122236** (0.0061978)	-0.0135999** (0.006202)
Kelowna	0.0601428*** (0.0117723)	0.0601939*** (0.011766)	0.0606233*** (0.0117664)	0.0642411*** (0.0117606)	0.0676458*** (0.0118591)	0.0685596*** (0.0118658)
Abbotsford	-0.0113806 (0.0073302)	-0.0112735 (0.0073299)	-0.0123868* (0.0073293)	-0.0129173* (0.0073373)	-0.0144516** (0.0073982)	-0.0136555* (0.007403)

(Continued)

Vancouver	-0.0484851*** (0.0058393)	-0.048395*** (0.0058385)	-0.0476252*** (0.0058396)	-0.0464625*** (0.0058462)	-0.0510204*** (0.005886)	-0.0512227*** (0.0058923)
Victoria	0.0545603*** (0.007412)	0.0545651*** (0.0074108)	0.0560491*** (0.0074098)	0.0601779*** (0.0074091)	0.0545024*** (0.0074512)	0.054857*** (0.0074591)
Twenties	0.1173282*** (0.0028072)	0.1172721*** (0.0028073)	0.1184574*** (0.0028092)	0.1054215*** (0.0027745)	0.0910722*** (0.002782)	0.085234*** (0.0027803)
Thirties	0.0456869*** (0.0020137)	0.0457143*** (0.0020134)	0.0421641*** (0.0019849)	0.0444294*** (0.0019744)	0.0306182*** (0.0019855)	0.030042*** (0.0019881)
Forties	0.0150618*** (0.001982)	0.0151523*** (0.0019819)	0.0068525*** (0.0018983)	0.0107291*** (0.001889)	0.0091062*** (0.0019043)	0.0098703*** (0.001907)
Sixties	0.0066732*** (0.0017943)	0.006536*** (0.0017946)	0.0135809*** (0.0017573)	0.0159129*** (0.0017542)	0.0095251*** (0.0017693)	-0.0008445 (0.0017574)
Male	-0.0267058*** (0.0013044)	-0.0269571*** (0.0013026)	-0.0251845*** (0.0012957)	-0.0251593*** (0.0012959)	-0.0169583*** (0.0013023)	-0.0133104*** (0.0012982)
LHS	-0.0823587*** (0.0027728)	-0.0833673*** (0.0017233)	-0.083705*** (0.0017223)	-0.0866067*** (0.0017198)	-0.1142193*** (0.0017133)	-0.1248586*** (0.0016843)
HS	-0.0416317*** (0.0026072)	-0.0405955*** (0.0016179)	-0.0403154*** (0.0016177)	-0.0429423*** (0.001616)	-0.0514673*** (0.0016249)	-0.0539788*** (0.0016241)
BD	0.0806622*** (0.0036221)	0.0840113*** (0.0019158)	0.0843321*** (0.0019168)	0.0868405*** (0.0019189)	0.1114338*** (0.0019071)	0.1140015*** (0.001908)

(Continued)

Unemployment	-0.0160901*** (0.0022326)	-0.0169238*** (0.0014706)	-0.017708*** (0.001468)	-0.0199682*** (0.0014691)	-0.0490701*** (0.0014285)	NA
Imidlow	0.0604595*** (0.0026798)	0.0592915*** (0.0018537)	0.0596538*** (0.0018547)	0.0511604*** (0.0018024)	NA	NA
Imidhigh	0.1005504*** (0.0027292)	0.1032402*** (0.0019569)	0.1029551*** (0.0019563)	0.0902182*** (0.00186)	NA	NA
Ihigh	0.1720506*** (0.0027725)	0.1716017*** (0.001985)	0.1702284*** (0.0019821)	0.1511012*** (0.0018399)	NA	NA
One Adult	0.017362*** (0.0015736)	0.0176595*** (0.001569)	0.0223839*** (0.0015456)	NA	NA	NA
Three Adults	-0.0302041*** (0.0022014)	-0.0305044*** (0.0021985)	-0.0302229*** (0.002192)	NA	NA	NA
Four Adults	-0.0530511*** (0.0034823)	-0.0534601*** (0.0034796)	-0.0517135*** (0.0034757)	NA	NA	NA
Five Adults	-0.0715932*** (0.0072089)	-0.0722562*** (0.007207)	-0.0687674*** (0.0071969)	NA	NA	NA
One Child	-0.0284498*** (0.0019335)	-0.0282751*** (0.0019337)	NA	NA	NA	NA
Two Children	-0.0202562*** (0.002114)	-0.019932*** (0.0021138)	NA	NA	NA	NA

(Continued)

Three Children	-0.0310734*** (0.0032908)	-0.0307354*** (0.003291)	NA	NA	NA	NA
Four Children	-0.0384865*** (0.0053291)	-0.0382336*** (0.00533)	NA	NA	NA	NA
lhs#imidlow	0.0026946 (0.0049095)	NA	NA	NA	NA	NA
lhs#imidhigh	-0.0001643 (0.0058544)	NA	NA	NA	NA	NA
lhs#ihigh	-0.0269211*** (0.0070403)	NA	NA	NA	NA	NA
lhs#uem	0.0012781 (0.0035454)	NA	NA	NA	NA	NA
hs#imidlow	-0.0063572 (0.0043796)	NA	NA	NA	NA	NA
hs#imidhigh	0.0016739 (0.0045843)	NA	NA	NA	NA	NA
hs#ihigh	-0.0037829 (0.0047376)	NA	NA	NA	NA	NA
hs#uem	0.0084725** (0.0035825)	NA	NA	NA	NA	NA

(Continued)

bd#imidlow	0.0034521 (0.0056405)	NA	NA	NA	NA	NA
bd#imidhigh	0.0133072** (0.0053254)	NA	NA	NA	NA	NA
bd#ihigh	0.0068974 (0.0047854)	NA	NA	NA	NA	NA
bd#uem	-0.0174276*** (0.0046487)	NA	NA	NA	NA	NA
Constant	0.0412914*** (0.003896)	0.0411765*** (0.0037771)	0.030588*** (0.0037169)	0.0363151*** (0.0035833)	0.1134352*** (0.003513)	0.1030075*** (0.0034974)
Number of Observations	604,866	604,866	604,866	604,866	604,866	604,866
R-squared	0.0578	0.0577	0.0572	0.0561	0.0443	0.0427
F-Statistic	440.62	504.43	533.27	559.3	467.26	455.34
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: \* indicates significance level of 0.10, \*\* for 0.05, and \*\*\* for 0.01.

(Continued)

Table 2: Test for the Joint Significance of Groups of Exogenous Variables: Prob > F and F Statistics in Brackets

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2006- 2010	2011- 2016
Season	0.0000 (435.59)	0.0000 (456.85)	0.0000 (434.68)	0.0000 (217.93)	0.0000 (219.62)	0.0000 (359.81)	0.0000 (362.47)	0.0000 (363.91)	0.0000 (328.78)	0.0000 (312.90)	0.0000 (320.36)	0.0000 (1758.86)	0.0000 (2598.81)
Province	0.0000 (29.47)	0.0000 (36.49)	0.0000 (33.05)	0.0000 (16.94)	0.0000 (19.66)	0.0000 (29.43)	0.0000 (23.90)	0.0000 (16.96)	0.0000 (16.94)	0.0000 (16.40)	0.0000 (12.73)	0.0000 (129.42)	0.0000 (120.76)
Census Metropolitan Area	0.0000 (20.03)	0.0000 (20.50)	0.0000 (16.67)	0.0000 (13.52)	0.0000 (13.23)	0.0000 (34.72)	0.0000 (26.82)	0.0000 (21.00)	0.0000 (20.30)	0.0000 (17.57)	0.0000 (18.47)	0.0000 (79.72)	0.0000 (129.64)
Age	0.0000 (115.62)	0.0000 (109.68)	0.0000 (112.39)	0.0000 (70.02)	0.0000 (48.06)	0.0000 (130.05)	0.0000 (113.23)	0.0000 (98.60)	0.0000 (77.30)	0.0000 (77.27)	0.0000 (47.80)	0.0000 (448.85)	0.0000 (585.99)
Education	0.0000 (252.20)	0.0000 (226.98)	0.0000 (213.45)	0.0000 (97.00)	0.0000 (96.37)	0.0000 (150.64)	0.0000 (134.88)	0.0000 (95.90)	0.0000 (122.91)	0.0000 (89.57)	0.0000 (76.25)	0.0000 (885.01)	0.0000 (499.77)
Income	0.0000 (338.05)	0.0000 (398.92)	0.0000 (374.04)	0.0000 (197.59)	0.0000 (222.06)	0.0000 (273.15)	0.0000 (234.51)	0.0000 (218.57)	0.0000 (211.28)	0.0000 (208.61)	0.0000 (259.82)	0.0000 (1526.65)	0.0000 (1443.38)
Number of Adults	0.0000 (22.86)	0.0000 (31.57)	0.0000 (27.20)	0.0000 (16.02)	0.0000 (14.26)	0.0000 (32.79)	0.0000 (42.81)	0.0000 (33.52)	0.0000 (21.35)	0.0000 (27.40)	0.0000 (27.51)	0.0000 (107.63)	0.0000 (162.29)
Number of Children	0.0000 (24.85)	0.0000 (32.51)	0.0000 (30.43)	0.0000 (13.35)	0.0000 (14.97)	0.0000 (13.74)	0.0000 (14.29)	0.0000 (17.13)	0.0000 (10.69)	0.0000 (11.84)	0.0000 (12.32)	0.0000 (110.73)	0.0000 (74.58)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2006- 2010	2011- 2016
Interaction	0.5552	0.0573	0.0001	0.0621	0.2007	0.0222	0.1438	0.0004	0.0110	0.0506	0.1247	0.0000	0.0000
Terms	(0.89)	(1.71)	(3.34)	(1.69)	(1.32)	(1.98)	(1.43)	(2.98)	(2.16)	(1.75)	(1.48)	(6.10)	(5.50)

Notes: Year variables only exist in the model of 2006-10 and 2011-16. Interaction terms including the education variables interact with unemployment and household income variables respectively.

(Continued)