# Assessing the Impact of Immigration on Rental Housing Costs in Canada: Is Immigration the Cause of Canada's Housing Affordability Crisis?

Krishna Paudel (66658931)

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Gyung-Ho Jeong

## Abstract

This paper examines the causal impact of immigration inflows on housing affordability in Canada, focusing on rental prices from 2000 to 2023 across ten provinces. Using panel regressions, Dynamic OLS, and Fully Modified OLS methods, the study finds that a 1% increase in immigration inflow relative to a province's population leads to a 0.236% increase in average rental prices. Although this effect is statistically significant, its magnitude is modest, indicating that immigration is only one of many factors influencing housing costs. The results suggest that long-run impacts are more pronounced than short-run effects, highlighting the need for sustained policy responses. To improve affordability, the study recommends combining calibrated immigration targets with faster housing supply expansions through zoning and construction reforms.


## Introduction

Between 2003 and 2023, the average Canadian's annual earnings grew from approximately $35,937 to $62,636, reflecting an increase of over 74%. However, over that same two-decade timespan, average home prices in Canada skyrocketed from about $207,510 to an outstanding $678,282, marking an explosive 227% jump that far outmatched the subsequent wage growth (Jarvis, 2024). This disproportionate increase in housing prices relative to income indicates that there may be a fundamental economic problem within the country, especially considering that the housing price-to-income ratio has risen substantially more in Canada than in any other G7 country in the same timespan (Pasalis, 2024). Furthermore, this issue has become particularly relevant in the past several years as the number of homeless encampments around the country have increased due to the substantial costs of housing, with many labeling it as Canada's Housing Affordability Crisis (Devswoon, 2024).

In the media, a large part of the blame for this crisis goes towards the large volumes of immigrants that Canada brings into the country every year. Between 2021 and 2023, Canada saw record highs of

approximately 450,000 new immigrants coming into the country per year, with many of these individuals arriving as temporary residents on student or work visas (IRCC, 2024). When such large quantities of individuals arrive in a region, it typically increases the demand for housing quite significantly, and without an equally substantial increase in housing supply, this rise in demand leads to large volumes of housing shortages and price hikes, for both the real-estate and housing rental markets (Al-Mallees, 2024). A prominent example of this is Toronto which has seen both an exponential growth in the number of homeless encampments in the last few years caused by housing shortages, as well as many instances of international students struggling to access food and shelter and being forced to share a single room with up to three others in order to afford the high price of rent (Gibson, 2025; Bhugra, 2024). For these reasons, immigration remains a key economic and political concern for Canadians as they head into the 2025 Federal Election in April, with different political parties providing varying policy stances on the matter. On one hand, the Liberal and NDP parties, who form the 9-year incumbent government, have begun to retract their plans to increase immigration inflow rates, reducing their target immigration numbers from 500,000 to under 400,000 between 2025-2027 (IRCC, 2024). On the other hand, the Conservative party proposes more substantial caps on immigration numbers, as well as more stringent rules on who Canada allows to enter the country, yet without any exact estimates on their policy (Rodrigues, 2025).

Collectively, Canada's Housing Affordability Crisis and the blame put on immigration begs an important economic question: what is the impact of immigration inflows on housing affordability in Canada? Additionally, is reducing immigration a viable strategy to address the rising housing costs in the country? This paper will seek to find an empirical answer to these questions by analyzing housing affordability and immigration inflow data across time within Canadian provinces. Furthermore, this paper will seek to inform Canadian policymakers on the impact of setting varying immigration rates.

## Literature Review

Economic theory, particularly the basic model of supply-and-demand, suggests that as immigration increases the population within a country, the demand for housing also rises. In turn, this increase in demand, when met with relatively fixed housing supply levels, leads to higher prices and higher levels of shortages as the quantity demanded of housing units exceeds the quantity supplied (Akbari & Aydede, 2012). To elaborate, an increase in population, driven by immigration, initially shifts the demand curve for housing outward, leading to upward pressure on both rental prices and home values. As such, if the short-run supply of housing is relatively inelastic due to several factors that typically constrain housing construction, such as zoning laws, high bureaucratic red tape, or construction lags, prices will rise rapidly, and this will also lead to a large shortage in housing units available in the market as the demand will be greater than supply (Mansa, 2023). Over the long run, the supply side may respond via new housing developments, zoning adjustments, or policy interventions, however, this process is often slow, creating transitory periods where the housing market is out of equilibrium, and rents or home values escalate rapidly (Mansa, 2023).

Furthermore, the impact of immigration inflows on housing costs is further complicated by issues of dynamic spillover effects, as shocks in one region's housing market gradually influence neighboring markets through interconnected economic channels (Mussa et al., 2017). Lastly, there is also an important concern of endogeneity because although it might be true that immigrants cause housing prices to increase by increasing demand, it might also be the case that increasing housing costs, which is indicative of a growing economy with more job and career prospects, are the reason that immigration is higher in certain areas (Sharpe, 2019). Vancouver and Toronto are prominent examples of this phenomenon, with many sources highlighting that immigrants typically prefer to settle in these large metropolitan areas, which already have significant and rising housing costs to begin with (Monras, 2024). Luckily, there is a significant amount of research in this topic area, which will allow us to identify various considerations before we develop our research methodology.

Initially, many research papers have explored the impact of immigration on Canada's real-estate market, focusing particularly on housing prices. Most prominently, Akbari and Aydede (2011), who utilized a panel regression approach controlling for local economic factors, found that immigration exerts a statistically significant upward pressure on housing prices. Similarly, Gala (2024) found that increasing immigration inflows exacerbates housing affordability challenges in urban centers, where rising home values outpace median income growth. However, Canada's housing affordability crisis extends beyond just the real-estate market and also concerns its rental sector, which is crucial since most immigrants rely on rentals as their primary form of accommodation upon arrival (Latif, 2015). Focusing on rental markets, Mussa et al. (2017) apply a spatiotemporal economic model that captures both geographic heterogeneity and temporal dynamics to investigate the impact of immigration on rental housing prices in US metropolitan areas. Their findings reveal that immigration-driven demand shocks in one metropolitan area elevate rental prices not only in those areas, but also in neighboring markets via commuter linkages and shared infrastructure pressures (Mussa et al., 2017). Contrastingly, Sharpe (2019) utilizes an instrumental variable approach to address the endogeneity introduced by immigration location choice, finding that although this approach attenuated the results, a 1% increase in immigration still leads to a nearly 1% increase in rent prices in the US.

Adding further depth to this discussion, Gunderson & Cukier (2024) note that there may be counterbalancing forces in the relationship between immigration and housing affordability. This is because many immigrants in Canada work in the construction and labour industry, meaning that they provide labour in building houses and this helps address the issue of housing supply constraints, which in-turn plays a role in alleviating the housing crisis instead of accentuating it (Gunderson & Cukier, 2024). Finally, Latif (2015) who analyzed province level panel data from 1983-2010 in Canada, finds that an increase in immigration inflow equal to 1 percent of province population leads to an increase in the average rent by 0.14 percent to 0.17 percent. The contribution of this paper to the existing literature will be to extend Latif’s analysis to include the years from 2010-2023, a period of unprecedented immigration and housing affordability

challenges in Canada. As such, my results should provide more representative and novel estimates of the impact of immigration on Canada's rental housing market.

## Data Sources:

This study employs panel data covering all 10 Canadian provinces from 2000 to 2023. The key variables are:

**Dependent Variable:**

- **Average Rental Prices**: Obtained from the Canada Housing and Mortgage Corporation (CMHC). This dataset reports the average annual rental price in each city with 10,000 or more residents across Canada. Unfortunately, as the cities in the Canadian territories do not meet this 10,000 resident requirement, the territories will not be included within the analysis. The processed estimates from this dataset thus represent the weighted average rent cost across cities in each province, providing a comprehensive provincial-level measure of rental housing costs. Specifically, this paper will look at the cost of renting a 2-bedroom apartment, both because it is the median of the dataset which reports the prices for 1-bedroom to 3-bedroom units, and because a significant portion of housing rentals are usually 2-bedrooms. One important consideration here is how the CMHC collects its data for this variable. Essentially, they use a survey-sample approach where they ask a random sample of residents in each city how much they pay for rent today, and how much they paid for rent in the past, then use statistical inferencing to provide estimates of the approximated average rental costs in each city, across time. There are two problems with this: one is that a significant portion of the people who participate in the survey are long-term renters and because most provinces have laws that prohibit landlords from substantially increasing rental prices year-by-year, the increase in rental prices that these residents face will be substantially lower than the increasing rental prices of new housing units, or housing units that are re-entering the market (Housing Rights Canada, 2025).

This would mean that the estimates reported by this dataset will be, on average, lower than the actual cost of renting a housing unit on the market at any given year. A second problem is that because the survey asks for what people used to pay in the past, there are some reliability issues as either people tend to underestimate how much they used to pay in the past to exaggerate the growth in costs, or because their recollection simply is not perfect.

**Key Independent Variable:**

- **Immigration Inflow**: Annual number of new immigrants arriving in each province, sourced from Statistics Canada, divided by the initial population of the province at the beginning of the year. This measure provides estimates how what percentage of the province's population growth came from immigration.

**Control & Other Variables:**

- **Real GDP per Capita**: Reported in 2017 chained dollars, this variable controls for economic growth and prosperity in each province (Statistics Canada), divided by total population in a given province, at the end of the year.
- **Unemployment Rate**: The average annual unemployment rate in each province, which captures both the labor market and general economic conditions of each province at each year (Statistics Canada).
- **Population**: Total annual population in each province, controlling for overall demographic trends beyond immigration (Statistics Canada).
- **Consumer Price Index (CPI)**: CPI index values adjusted for 1992=100, serving as a measure of inflation (Statistics Canada).

Figure 3 provides a brief overview of the distribution of some of these variables for four primary Canadian provinces including Ontario, British Columbia, Quebec, and Alberta. The figure signals the

accuracy of the data as we see rising average rental costs across time, with BC and ON being the highest values, which is consistent with what we know. Furthermore, we can see that GDP per Capita generally trends upwards except for two dips during 2008 and 2020, due to the two financial crises at those times, and these results are also conversely reflected in spikes in unemployment rate at those times. Finally, we can also see that, consistent with our research, average immigration has been increasing throughout the provinces since the year 2000, with Ontario having significantly higher values than the other provinces, which is accurate.

## Empirical Strategy

My empirical strategy begins with a simple panel regression analysis with data from 10 Canadian provinces, between 2000-2023, which follows the structure of Model 1 shown below. In this model, average annual rental prices are regressed on immigration inflows, real GDP per capita, and the unemployment rate. Province fixed effects are incorporated to control for time-invariant, province-specific characteristics such as cultural factors, geographic constraints, or long-standing policy environments that could otherwise confound the estimated relationships. Most important here is that these province fixed effects will also account for the housing supply constraints across provinces, such as variations in zoning laws, and other factors that play a key role in determining how much new housing is constructed in different provinces, and this will account for the supply side of the supply-demand forces effecting housing rental costs. Furthermore, Year fixed effects are also utilized to account for nationwide trends and macroeconomic shocks that affect all provinces simultaneously each year. I hypothesize that the coefficient on immigration will be positive and significant, indicating that increased immigration raises rental prices. Similarly, the coefficient on GDPPC should be positive as areas that have higher per capita income generally coincide with larger housing demand, because people have more purchasing power, and consequently higher rental costs. Alas, the coefficient on Unemployment Rate should be small, but negative because when

unemployment rate is high, people can generally afford less because their income is lower, suggesting that their consumption on housing rentals should also be lower.

**Model 1:**

$$\ln(\text{Rent}_{i,t}) = \beta_0 + \beta_1 \ln\left(\text{Immigration}_{i,t}\right) + \beta_2 \ln(\text{GDPPC}_{i,t}) + \beta_3 \text{Unemployment\_Rate}_{i,t} + \alpha_i + \gamma_t + \varepsilon_{i,t}$$

Unfortunately, this model, particularly the time-series aspect of the panel data, includes various potential biases that could confound my estimates and results. One such bias is introduced by the significant autocorrelation in my dataset. Autocorrelation occurs when error terms from one period are correlated with error terms in another, violating the assumption of independent errors in classical regression analysis (Frost, 2023). This is a significant issue because it can lead to inefficient coefficient estimates and biased test statistics, potentially overstating the significance of the estimated effects. There is likely a lot of autocorrelation in my dataset because the previous year's average rental price is expected to be strongly correlated with the current year's average rental price. To verify this, this paper will use the Durbin-Watson test, a statistical test designed specifically to identify first-order autocorrelation in the residuals of a regression model. This test yields values between 0 and 4, with values close to 2 suggesting that there is no autocorrelation, values close to 0 indicating positive autocorrelation, and values close to 4 implying that there is negative autocorrelation in the data and regression (Kenton, 2024).

Another large issue in my methodology is the endogeneity introduced by immigrants' choice of where to live, which may involve reverse causality and bias my estimates. To address this, this paper will employ two, more sophisticated empirical models in an attempt to replicate the same empirical strategy that Latif (2015) utilized. These will be the Dynamic OLS (DOLS) and Fully Modified OLS (FMOLS). DOLS adjusts for both endogeneity feedbacks and autocorrelation by incorporating leads and lags of the first-differenced explanatory variables, thereby ensuring that any potential feedback effects between the regressors and the error term are adequately controlled (Maeso Fernández et al., 2004). Similarly, FMOLS corrects for endogeneity and autocorrelation through non-parametric adjustments to the regression

coefficients, allowing for consistent estimation even in the presence of serial correlation and cointegration among the variables (Maeso Fernández et al., 2004). One important note is that both of these models utilize lags which will be set to a standard of two-years. Furthermore, the empirical design of these models captures the underlying equilibrium relationship between the dependent and independent variables, which means that the estimates we find will have long-run interpretations (Frost, 2023). Additionally, it is important to note that although these models are great at adjusting for autocorrelation, they are only mildly effective in terms of adjusting for endogeneity, suggesting that further studies on this topic could utilize an instrumental variable approach instead to investigate this relationship whilst fully adjusting for endogeneity. Finally, although the empirical methodology behind these models is complex, their implementation is relatively straightforward, and I will use them to obtain more accurate estimates of my coefficients.

Model 2:

$$DOLS\ Model:$$

$$\ln(\text{Rent}_{i,t}) = \alpha + \beta_1 \ln\left(\text{Immigration}_{i,t}\right) + \beta_2 \ln(\text{GDPPC}_{i,t}) + \beta_3\, \text{UN}_{i,t} + \sum_{l=-n}^{n} \Delta X_{i,t+2} + \varepsilon_{i,t}$$

$$FMOLS\ Model:$$

$$\ln(\text{Rent}_{i,t}) = \alpha + \beta_1 \ln\left(\text{Immigration}_{i,t}\right) + \beta_2 \ln(\text{GDPPC}_{i,t}) + \beta_3\, \text{UN}_{i,t} + u_{i,t}$$

$$Y_{it} = \alpha_i + \beta_i X_{it} + u_{it}$$

$$X_{it} = X_{i,t-2} - \varepsilon_{it}$$

At last, to further test the hypothesis, this paper will perform an additional empirical test, inspired by Latif (2015)'s research design, by estimating a panel-model causal regression. To account for autocorrelation, it will include the previous year's rent as a regressor, and re-check the Durbin-Watson test to ensure that the test statistic moves closer to 2 compared to the initial model, thereby indicating reduced

serial correlation. Additionally, this paper will incorporate the residual errors from the DOLS model as a regressor in this panel regression to capture any remaining dynamics or omitted variable biases that may not have been fully addressed in the primary specification. Essentially, these residuals reflect the extent to which the variables diverge from their long-run cointegrated relationships; incorporating them allows the model to gauge how short-run adjustments in rental prices respond to persistent imbalances, thus providing a more accurate assessment of the causal dynamics at play. Lastly, this model will also utilize Province and Year Fixed Effects to account for the differences across time and across provinces, most importantly, the supply-side forces that impact housing rental prices. As such, I predict that because the model contains both supply, captured by province fixed effects, and demand, captured by the immigration inflow regressor variable, the R-squared should be significantly high because these are the primary forces that effect prices.

Model 3:

$$RENT_{i,t} = \beta_0 + \lambda\,\mathrm{ECT}_{i,t} + \beta_1 \mathrm{RENT}_{i,t-1} + \beta_2 \mathrm{IMM}_{i,t} + \beta_3 \mathrm{GDPPC}_{i,t} + \beta_4 \mathrm{UN}_{i,t} + \alpha_i + \gamma_t + u_{i,t}$$

## Results and Interpretations

Initially, Table 1 shows the results of the first, simple OLS regression. As hypothesized, we see positive and statistically significant coefficients, at the 5% level, on Immigration Inflows. Although once we add fixed effects, the coefficient values decrease drastically, the estimates show that an increase in immigration inflow equal to 1% of province population leads to an increase in the average rent by 0.024%. To visualize this positive relationship, Figure 3 shows a scatterplot between Immigration and Rental Prices, with a superimposed regression line which indicates a positive relationship between the two variables. Furthermore, the coefficient on GDPPC is also positive as hypothesized, and we see that the coefficient on Unemployment Rate is not statistically significant. Secondly, after running the Durbin-Watson test on this

regression, we see in Table 2 that the result is around 0.55, which is very close to 0, indicating that there is significant positive autocorrelation in the data as previous years' values are highly positively correlated with current year values. As such, these results that we find are not completely accurate.

Next, Table 3 shows the results of the DOLS and FMOLS regressions, and we can see that both of these empirical models gave very close estimates, both of which were statistically significant at the 1% level. We see that an increase in immigration inflow equal to 1 percent of province population leads to an increase in the average rent by 0.236%. As hypothesized, this result is indeed higher than Latif's (2015) estimates, who found this to be 0.14-0.17%. We also see that GDPPC is significant and has a higher coefficient than Immigration Inflow, suggesting that it plays a more significant role in determining average rental price. Lastly, again, we see that the coefficient on Unemployment Rate is not statistically significant, but still barely positive and very small.

Finally, after collecting the residuals from the DOLS model and running the final panel-model regression using the previous year's average rent price as a regressor to account for autocorrelation, Table 4 shows very statistically significant results which indicate that even in the short run, immigration has a positive and significant impact on rental prices. One thing to note however is that these results do have smaller coefficients than the DOLS model, which indicates that immigration has more of an impact on average rental costs in the long run than in the short run. Alas, I also tested this regression with the Durbin-Watson test, which showed a value of 2.28 (Table 5) which is very close to 2, indicating little to no autocorrelation, meaning our results are accurate.

Overall, there are three important things to note. The first is that the positive and significant coefficients on each of the different models we ran suggest that there is in fact a causal relationship between the immigration inflows and housing rental prices, with higher immigration levels typically leading to increases in rental prices. Second, although we have significant results, the actual size of the estimates are quite low as a 1% increase in a province's population, caused by immigration growth, only results in a 0.24% increase in rental prices. For example, BC brought in approximately 175,000 immigrants in 2023,

and BC's population at the beginning of the year was around 5.3 million, suggesting a population increase of 3.3% from immigration in just one year, which would raise rental prices by 0.236*3.3 = 0.78%, which is not a substantial amount, but over the long run, this has the potential to accumulate and have a significant impact on rental prices. Thirdly, this fact is substantiated by our finding that immigration has a larger impact on rental prices in the long run, as demonstrated by the higher coefficient values on the DOLS and FMOLS model, compared to our panel regression model.

## Policy Implications and Conclusion

In conclusion, the findings of this study have significant implications for Canadian housing policy and immigration planning. Empirical evidence from multiple estimation models, ranging from simple OLS to advanced techniques such as DOLS and FMOLS, consistently indicate that immigration inflows exert a positive and statistically significant effect on rental prices. This suggests that, in provinces experiencing high levels of immigration, rising rental costs are not merely a function of market dynamics but are also driven by sustained increases in housing demand caused by positive immigration shocks. As such, reducing immigration levels may have positive impacts by slowing the pace of rising rental costs, however, due to the low coefficient values as well as the long-term effects being greater than the short-term effects, it will likely take several years of low immigration inflow to see an impact on average rental prices in Canada. One big reason for this is because supply increases much slower than immigration as it takes many years to build housing units. However, if immigration inflow is set to low values, it will allow supply to increase faster than demand in the long term, driving the price back down towards a sustainable equilibrium. As such, policymakers should consider strategies to address the imbalance between rising demand and limited housing supply. Reforms in zoning regulations and land-use policies could facilitate faster approval and construction of new housing units, thereby alleviating pressure on rental markets. Targeted investments in infrastructure and affordable housing projects may also help buffer short-run impacts of immigration-driven demand shocks.

Despite these promising insights, this research is not without limitations. A major constraint is the quality of the data. For example, the CMHC dataset occasionally shows inaccuracies. In one case, the dataset reported the average rent for a two-bedroom apartment in Vancouver as $2,800 in 2023, when market evidence suggests it was closer to $3,800. Moreover, the analysis aggregates data at the provincial level, potentially obscuring significant intra-provincial variations. Future research could expand upon this work by conducting analyses at the municipal or census metropolitan area level. Researchers might also explore a spatiotemporal approach, similar to the research design applied by Mussa et al. (2017), to capture localized dynamics and spillover effects more accurately within the Canadian context. In conclusion, while this study provides robust evidence on the causal impact of immigration on rental prices, addressing data limitations and refining the geographical scope of analysis will be key steps in furthering our understanding of the complex interplay between immigration and housing affordability in Canada.

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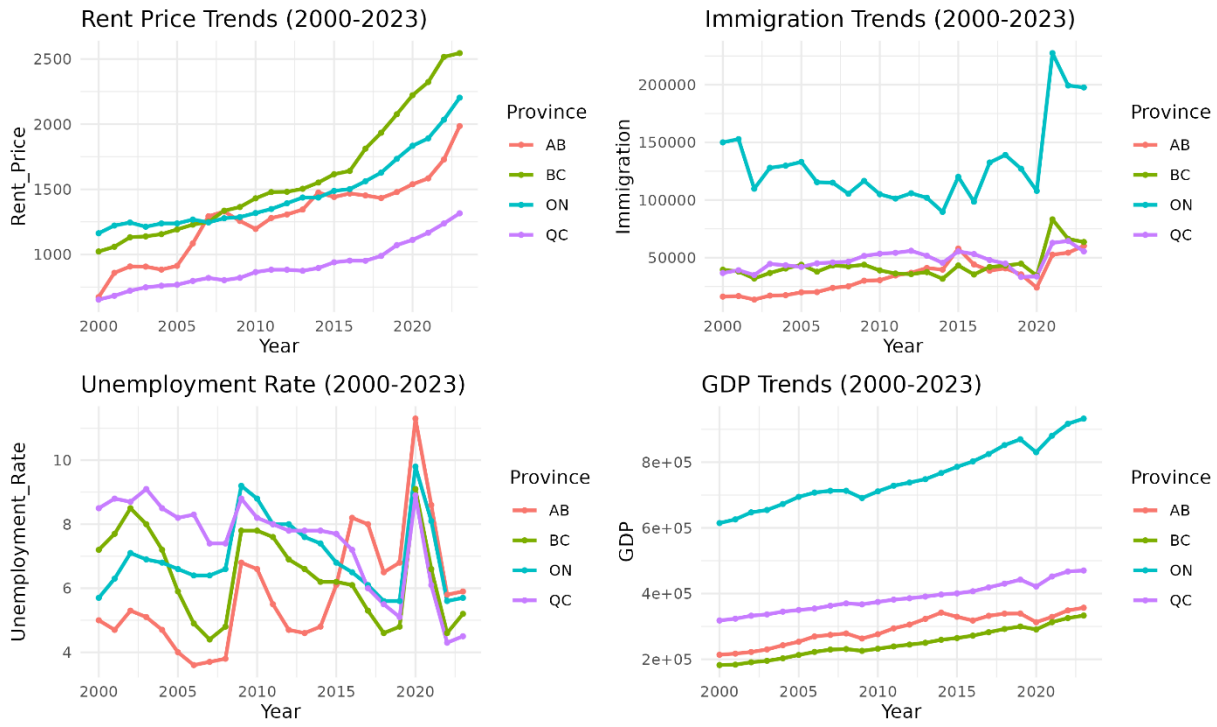
Rent Price Trends (2000-2023)
Rent_Price
2500
2000
1500
1000
2000
2005
2010
2015
2020
Year
Province
AB
BC
ON
QC
Immigration Trends (2000-2023)
Immigration
200000
150000
100000
50000
2000
2005
2010
2015
2020
Year
Province
AB
BC
ON
QC
Unemployment Rate (2000-2023)
Unemployment_Rate
10
8
6
4
2000
2005
2010
2015
2020
Year
Province
AB
BC
ON
QC
GDP Trends (2000-2023)
GDP
8e+05
6e+05
4e+05
2e+05
2000
2005
2010
2015
2020
Year
Province
AB
BC
ON
QC

Figure 1: ^

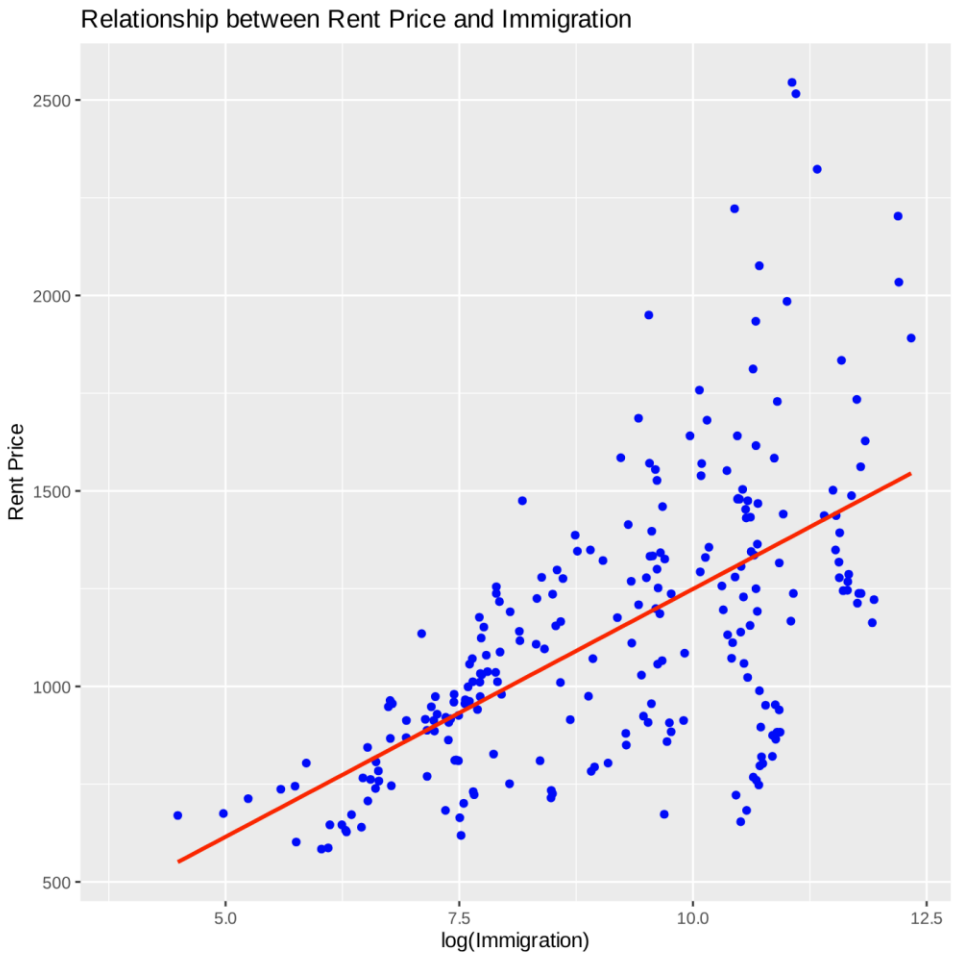
Relationship between Rent Price and Immigration
Rent Price
2500
2000
1500
1000
500
5.0
7.5
10.0
12.5
log(Immigration)

Figure 2:

**Regression Results**

| | *Dependent variable:* | |
|---|---|---|
| | Rent Price | |
| | Model 0 | Model 1 |
| | (1) | (2) |
| Immigration_Inflow | 0.220*** | 0.024** |
| | (0.023) | (0.011) |
| GDPPC | 0.269*** | 0.789*** |
| | (0.080) | (0.148) |
| Unemployment_Rate | -0.006 | 0.021*** |
| | (0.006) | (0.005) |
| Constant | 4.235*** | -2.105 |
| | (0.886) | (1.657) |
| Province Fixed Effects | No | Yes |
| Year Fixed Effects | No | Yes |
| Observations | 240 | 240 |
| $R^2$ | 0.460 | 0.959 |
| Adjusted $R^2$ | 0.453 | 0.952 |
| Residual Std. Error | 0.226 (df = 236) | 0.067 (df = 204) |
| F Statistic | 67.054*** (df = 3; 236) | 136.854*** (df = 35; 204) |
| *Note:* | | *p<0.1; **p<0.05; ***p<0.01 |

Table 1: ^

**Durbin-Watson Test**

| | |
|---|---|
| **Data:** | Model1 |
| **DW Test Statistic:** | 0.53684 |
| **p-value:** | < 2.2e-16 |
| **Conclusion:** | There is strong evidence of autocorrelation in the model. |

Table 2

**Panel Cointegrated Regression Results**

| **Variable** | **FMOLS Model** | **DOLS Model** |
|---|---|---|
| Immigrant | 0.236*** | 0.236*** |
| | (0.066) | (0.079) |
| Per Capita Real GDP | 0.630*** | 0.639*** |
| | (0.026) | (0.029) |
| Unemployment Rate | 0.138 | 0.092 |
| | (0.146) | (0.166) |
| *Note:* | | *p<0.1; **p<0.05; ***p<0.01 |

Table 3:

**Panel Causality Regression Results**

| | *Dependent variable:* |
|---|---|
| | Rent Price |
| ECT | $0.016^{***}$ |
| | (0.004) |
| Immigration_Inflow | $0.045^{***}$ |
| | (0.012) |
| Rent_Price_Last_Year | $0.514^{***}$ |
| | (0.078) |
| GDPPC | $0.945^{***}$ |
| | (0.175) |
| Unemployment_Rate | $0.062^{*}$ |
| | (0.036) |
| Constant | $5.927^{***}$ |
| | (0.891) |
| Province Fixed Effects | Yes |
| Year Fixed Effects | Yes |
| Observations | 108 |
| $R^2$ | 0.996 |
| Adjusted $R^2$ | 0.993 |
| Residual Std. Error | 0.023 (df = 73) |
| F Statistic | $475.782^{***}$ (df = 34; 73) |
| *Note:* | $^{*}$p<0.1; $^{**}$p<0.05; $^{***}$p<0.01 |

Table 4:

| Durbin-Watson Test | |
|---|---|
| **Data:** | Model7 |
| **DW Test Statistic:** | 2.2839 |
| **p-value:** | < 0.6481 |
| **Conclusion:** | There is no significant evidence of autocorrelation in the model. |

Table 5: