Zeppelin's Real Estate Tech

3Q 2020: A Real Estate Newsletter by Zeppelin Partners Limited
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There are plenty of geopolitical tensions around the world and salvos have been exchanged. As a result, Hong Kong's status as an international financial hub is also being challenged. Chao has also appeared in parts of the Middle East such as Lebanon. Meanwhile, Covid19, despite the summer heat, is still rampant in many corners of the globe.

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"Equality and equity aren't the same, and they don't always correlate."

We also like to hear from readers wishing to share their real estate experience with us.

This quarterly (generally published in spring, summer, fall, and winter) newsletter is circulated freely via email to readers comprising real estate developers, investors, fund managers, financiers, owners, users, top executives, senior managers, prominent academics and related professionals from Hong Kong and abroad. Our content is / has also been published in newspapers and web portals such as the **South China Morning Post, China Daily**, **Hong Kong Economic Journal**, **21st Century Business Herald**, **Apple Daily**, **Sing Tao**, **Quamnet Magazine**, **The Standard**, **MITCRE Alumni Newsletter**, **Surveying Newsletter**, **Reidin.com, Centanet.com, Netvigator.com, Hongkong.com, E-finet.com, Red-dots.com, PacificProperties.net**, **Soufun.com** and **House18.com**. We had also been quoted in the **Asian Wall Street Journal** and interviewed by **USA Today**, **i-Money**, **Ming Pao, Radio Hong Kong**, **Cable TV (Money Café), DBC Radio,** and **Commercial Radio**. We also publish monthly articles and analyses in the months in between. This newsletter is now into its **24th** year and **96th** issue.

We also operate a website www.real-estate-tech.com through which we intend to share some of our real estate knowledge and ideas with interested parties. There are close to 1,000 content items, in English or Chinese, including analyses, articles, charts, and tables, plus spreadsheets, tutorials, e-books, and the like, the majority of which is free with some requiring a token fee. The website has been visited by tens of thousands from all over the world.

Zeppelin Partners Limited is involved in real estate development, investment, and management and offers services related to real estate asset management [analysis, investment strategy, and portfolio allocation], project management [architectural design, cost control, and contract administration], and facility management [facility utility assessment, property management strategy, and building maintenance]. We are based in Hong Kong with access to regional and global professional networks.

Stephen Chung, who created and writes this newsletter, has relocated to Toronto, Canada where he will focus on real state markets in North America. As part of the company's strategy, Stephen is now a non-executive Honorary Advisor to Zeppelin Partners Limited. He will continue to write this newsletter.

Who? Me?

Stephen Chung
Honorary Advisor, Zeppelin Partners Limited
Founder and Writer, Real Estate Tech Quarterly Newsletter
Real Estate Website Developer, www.Real-Estate-Tech.com

Stephen is an independent real estate analyst – number cruncher and chartered surveyor and has been involved in real estate development, investment, and management in Hong Kong / China / Asia and North America.

Stephen provides relevant real estate market insights and macro-micro assessments to real estate developers, investors, owners, financiers, funds, and civic organizations, and possesses many years of experience in building economics, project management, facility strategy, marketing, and research.

Stephen is also a regular real estate writer - columnist and his articles have been published in both English and Chinese media including the following:

- China Daily
- Hong Kong Economic Journal
- South China Morning Post
- Apple Daily, Sing Tao Daily
- Quamnet Magazine
- Real estate and finance websites such as Soufun.com, Finet.com etc
- Journals of professional institutes such as the Hong Kong Institute of Surveyors

Stephen is an honorary adjunct professor of the University of Hong Kong and has been invited to speak to audiences from:

- Universities: such as the University of Hong Kong, City University of Hong Kong, York University
- Professional Institutes: such as the Hong Kong Institute of Surveyors, Canadian Institute of Quantity Surveyors, Royal Institute of Chartered Surveyors
- Business Associations: such as the Rotary Clubs

Stephen has written 4 real estate books in Chinese to date as follows:

Online book = Easy Real Estate Lectures
Hard copy = Real Estate Investment Know-How above 101
Hard copy = The Real Estate Market Turning Point
E-Report = USA Residential Real Estate Analysis

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Between Toronto residential real estate and the TSX index

Real Estate Tech, 3Q 2020

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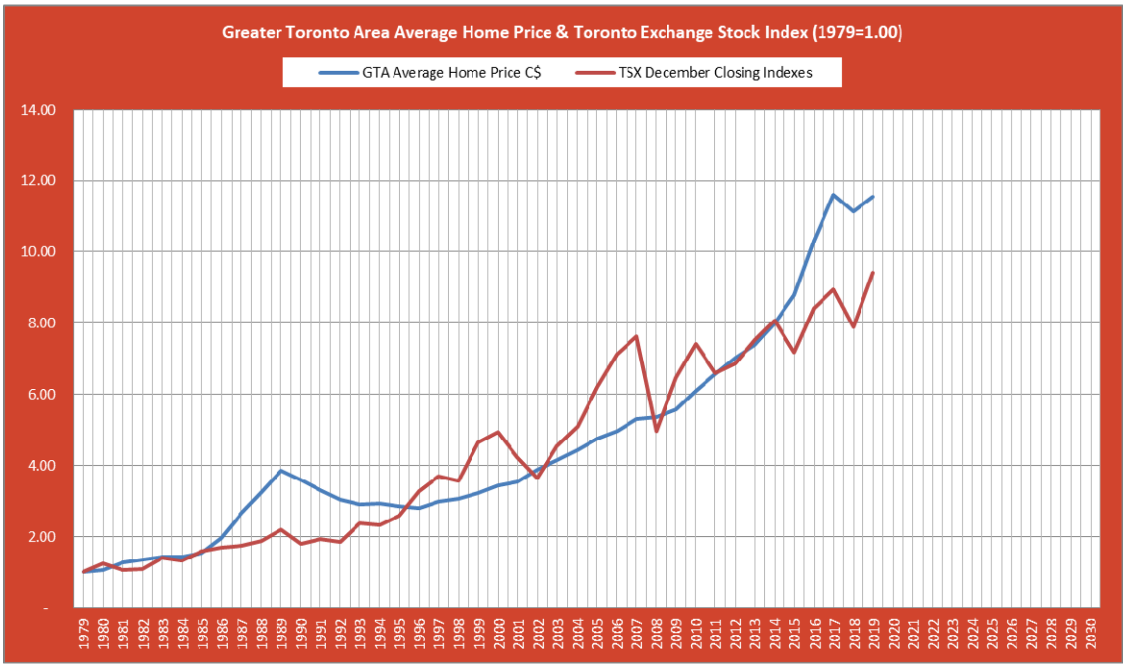
Toronto Stock Exchange's new trading floor, 1937 (Courtesy of https://commons.wikimedia.org)

Here, we seek to answer one question: which investor, residential real estate or stock, would win the race? And the winner is: the residential real estate investor. Here is the proof:



Wait a minute, since which year? Since 1979, and results could vary with varying starting year.

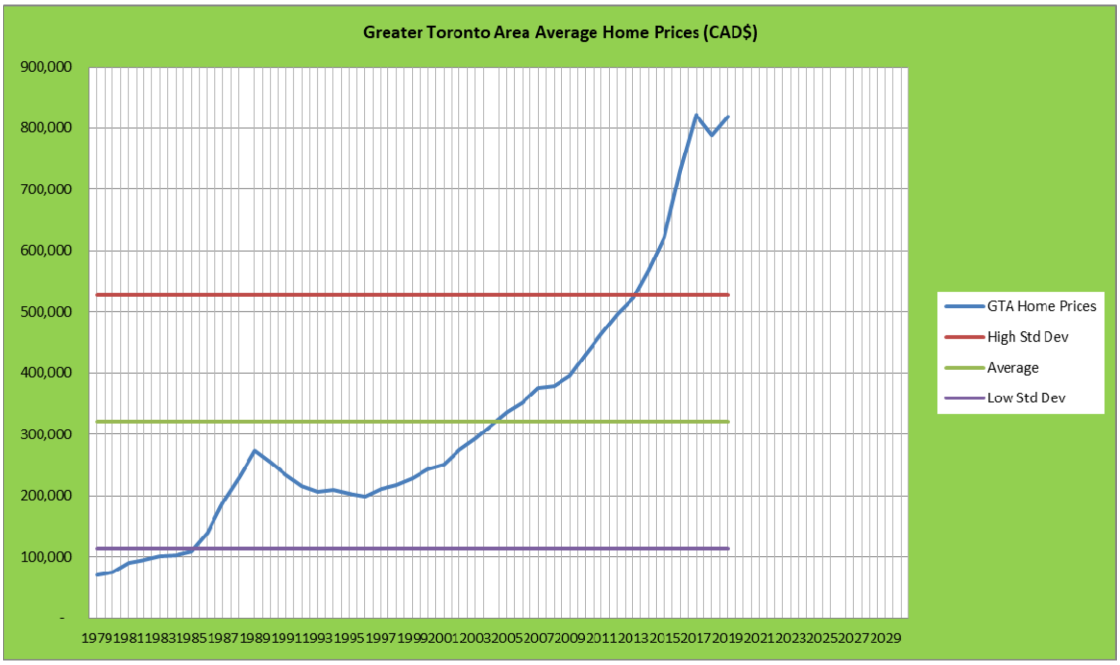
And it assumes both the residential real estate investor and the stock investor are "typical" i.e. average investors. If either isn't typical, the results between them might be very different. For instance, an unlucky / stupid residential real estate investor could very well lose in terms of investment performance to a typical stock investor during the 1979 to 2019 period notwithstanding the real estate market robustness, and for that matter, a brilliant stock investor could also trump a typical residential real estate investor, again within the same time period.

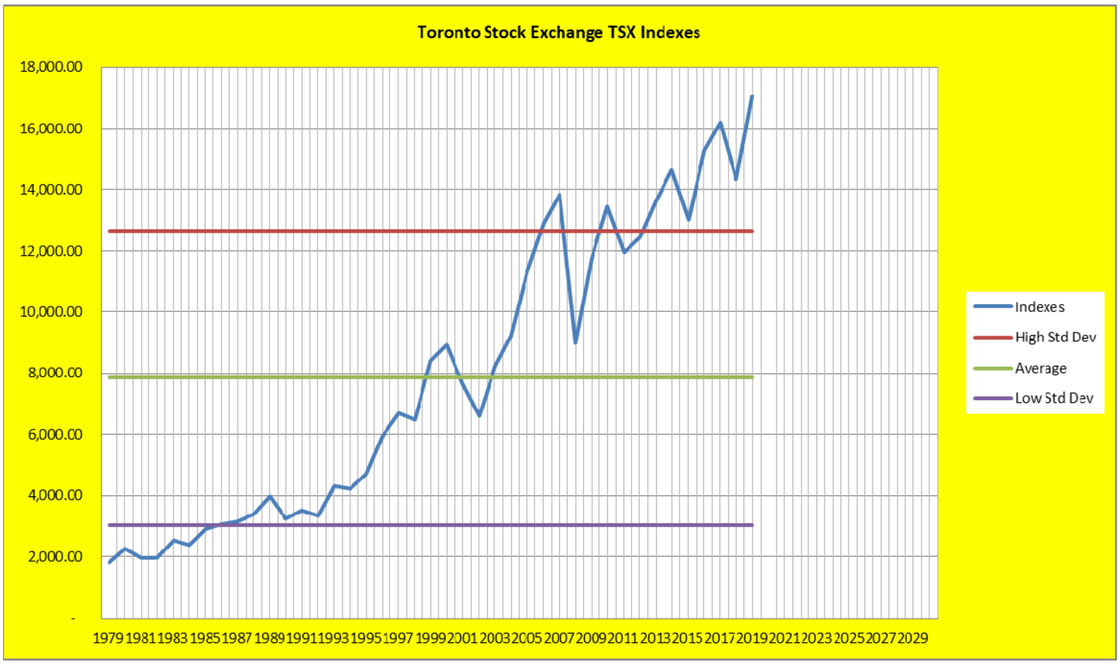
Looking at the chart a bit closer, one would find a) residential real estate investors as a whole did better for the most part of the 1980s; b) stock investors had a better time for most of the 1990s and from the 2000s to mid-2010s; and c) residential real estate investors have had winning streaks in recent times.

Note the real estate figures used are annual averages published in www.trreb.ca while the stock figures are the December closing indexes abstracted from https://www150.statcan.gc.ca i.e. these are rough statistics and thus are meant for rough reference only. Don't do investments based solely on these!

Nonetheless, these two sets of data correlate quite significantly over the longer timeframe i.e. they move similarly although not to the tilt. Perhaps they share common factors e.g. increased GDP and incomes although capitals might favor one market sector over the other at any one moment in time.

Both markets tend to be volatile too yet as of 2019, the residential real estate average market price may seem relatively riskier compared to the stock market based on simple standard deviation measures. This said, do note the two markets are not similar in nature e.g. stock prices are available in real time and by the second while real estate prices aren't. That is, refer to the charts below and the interpretation with a sufficient grain of salt:





As to why the residential real estate market ‘seems’ “relatively” riskier: because the 2019 figure’s differences over the market’s high standard deviation, average, and low standard deviation levels are all higher than those for the stock market:

Residential real estate market

Latest % over:	High Std Dev	Average	Low Std Dev
Percentages %:	55.50	155.73	619.44

Stock market

Latest % over:	High Std Dev	Average	Low Std Dev
Percentages %:	34.86	117.43	460.76

As mentioned, the above comparison is at best a rough reference, plus your humble author is no stock analyst.

Toronto: effects of rental controls on residential rental incomes

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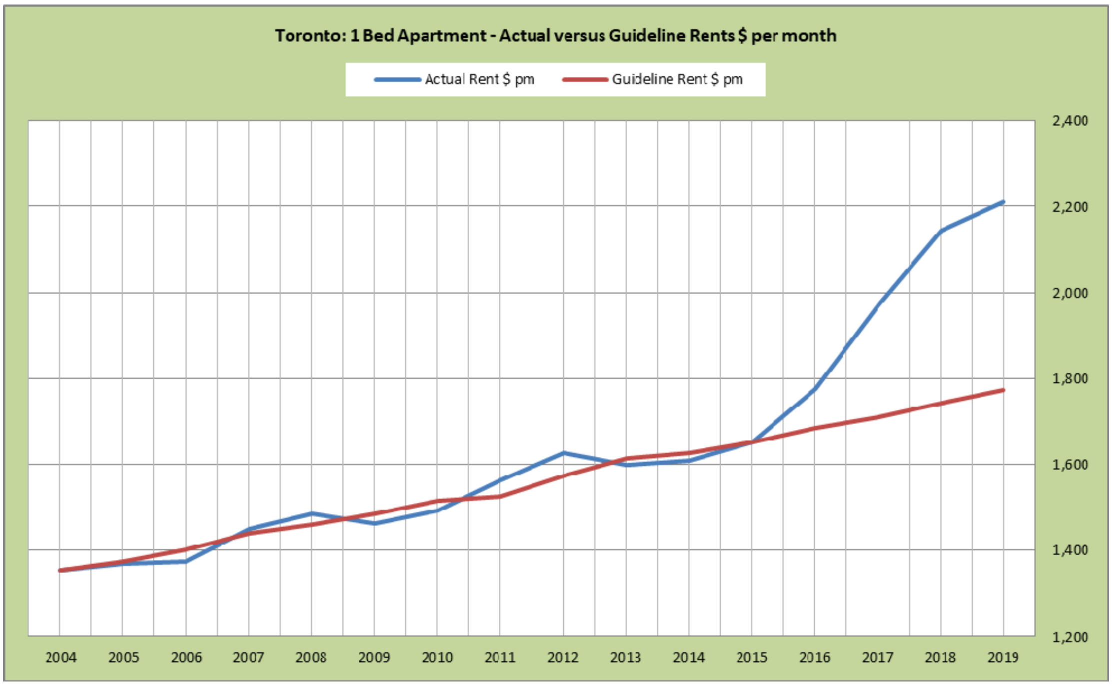
Downtown condo apartment towers (Courtesy of https://www.publicdomainpictures.net)

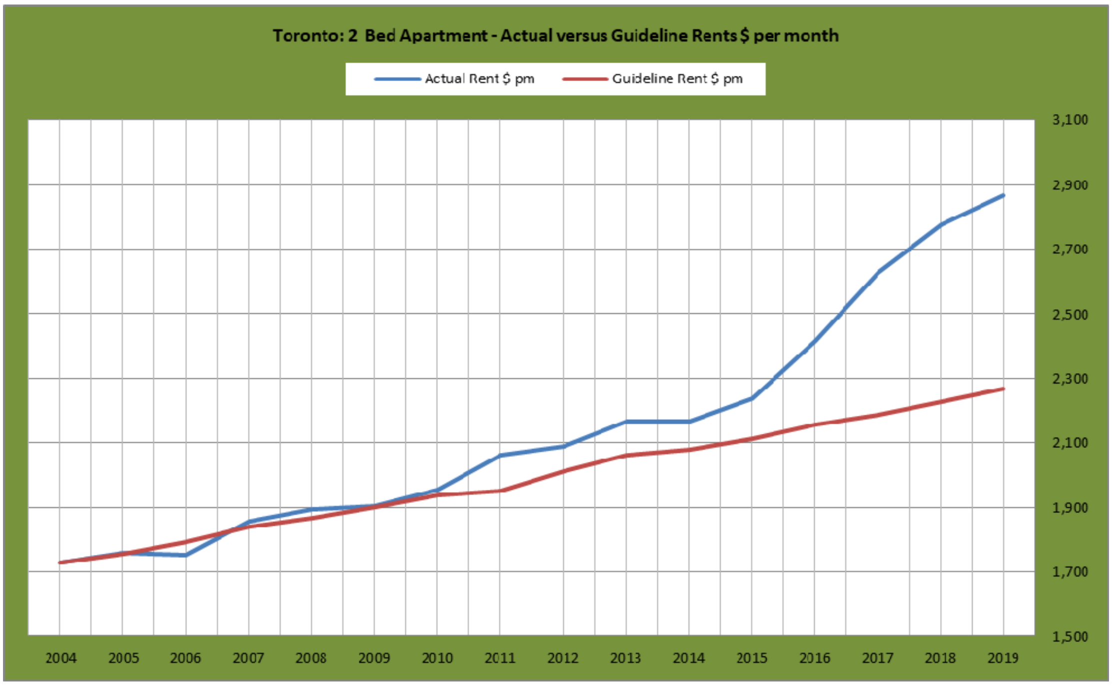
There is rental control in Ontario and thus by extension in Toronto. Here we wish to ascertain the effects / implications of rental control on the rental income prospects for investors-landlords.

First, a simple note: each year the government would announce a maximum allowable percentage increase which varies from year to year for residential rents. If landlords wish to ask for a rate higher than the allowable percentage increase, then they would need to obtain approval from a tribunal. Else, they are free to increase the current rents up to the allowable maximum rate.

Here we have collected relevant data from 2004 to 2019, and compared the difference between a) the overall market rental trend and b) the rental trend of a property which has been rented to one single tenant throughout the period and which rent increases annually based on the maximum allowable percentage.

Here are the resulting charts: one for 1Bed apartment unit and the other for 2Bed apartment unit. Data sources include www.ontario.ca, www.trreb.ca, and www.statcan.gc.ca.





Visual analysis:

1) The **blue** line represents the market rental trend while the **red** line reflects the rental trend when the property has been rented to one single tenant throughout the period thus following the maximum allowable percentage rent increases.

2) Roughly speaking, the differences between the two trends weren't significant counting from 2004 to 2015, however, starting in 2016 the two trends began to diverge significantly resulting in a more than 20% difference in 2019.

As to why, your humble author hasn't done any detail research although he suspects it might have something to do with the allowable percentage increases being based on consumer price indexes which, in turn, contain a lot more than just housing activities.

3) It is interesting to note while annual changes in the two market rental trends (Bed and 2Bed) correlate significantly, both do not jive much with the maximum allowable percentage increase changes.

Thus, one may suspect the maximum allowance percentage increases bear little relevance to actual market rental changes (which by the way have gone negative at times) i.e. it could be a coincidence that the resulting rents treaded more or less together from 2004 to 2015.

Now, does that mean, in order to capture the optimal market rents, one should invest in properties / apartment units which are popular among shorter term tenants (say three years or less) such as overseas college students, corporate tenants, or the like? Yes, this does make sense, however, do be aware of overly frequent turnover of tenants because there are expenses e.g. broker's fee (usually equal to one month rental) and opportunity costs (even in a hot market, turnover time may mean a month's vacancy, sometimes more).

Using the above 1Bed scenario as a rough example, continuing to rent to the existing tenant for another year would mean $1800 x 12 months = $21600, while finding a new tenant who is willing to pay the market rent of $2200 would mean $22000 in the next year AFTER deducting for the one month's broker's fees and one month vacancy-turnover time. The difference is $400. Naturally, the difference will be larger in the second year of tenancy.

Yet, getting rid of an existing tenant for obtaining higher market rents is against the law.

Crimes and average home prices across cities in Canada

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Tie a yellow ribbon? (Courtesy of https://www.publicdomainpictures.net)

Do crime levels and average home price levels jive in Canada? Friends and investors asked. Let's explore:

A) Data sources: crime numbers have come from www.numbeo.com and https://www150.statcan.gc.ca while average home prices are sourced from www.crea.ca.

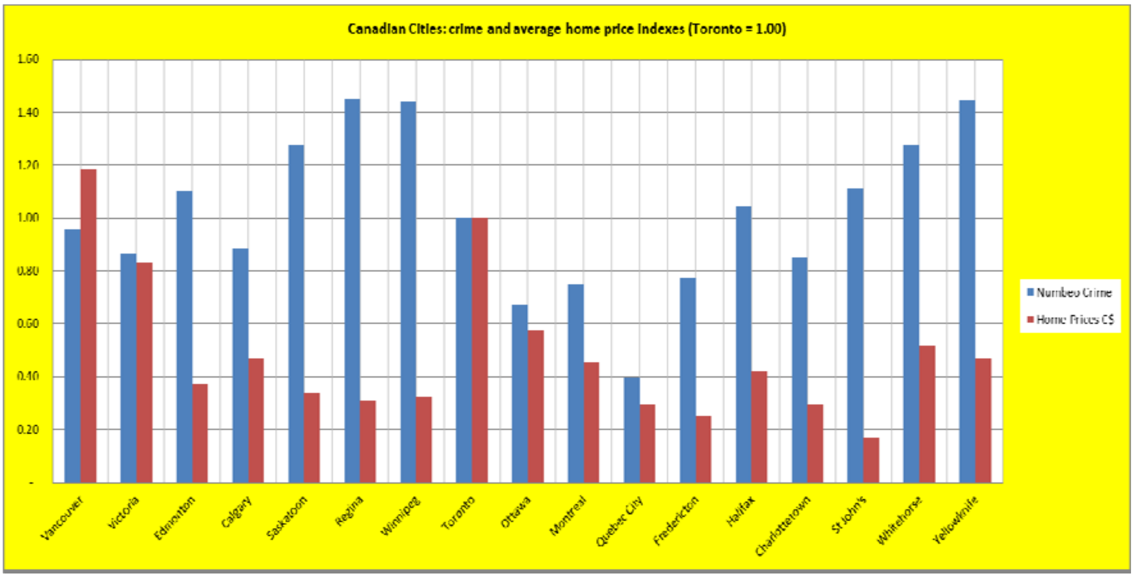
Briefly, numbeo numbers are collected by online on an ongoing basis from contributors (questionnaire participants) and there are subcategories of crime, and the statcan figures are provincial and annual based on crime reports. These two sets of data have some degree of correlation. The home prices numbers are those found in June 2020.

As such, there could be discrepancies in terms of time and nature of the statistics, however, the results may still be useful as a rough reference.

Countries	Provinces or States	Cities / Towns	Numbeo Crime Indexes	Stats Canada Per 100k popn Provincial 2019	Average Home Prices C$ June 2020
Canada	British Columbia	Vancouver	36.99	7,400	1,025,300
		Victoria	33.40	7,400	717,800
	Alberta	Edmonton	42.69	8,607	318,200
		Calgary	34.22	8,607	405,200
	Saskatchewan	Saskatoon	49.40	11,461	291,700
		Regina	56.12	11,461	265,000
	Manitoba	Winnipeg	55.81	9,392	281,100
	Ontario	Toronto	38.67	4,113	863,700
		Ottawa	25.81	4,113	492,700
	Quebec	Montreal	29.12	3,304	391,900
		Quebec City	15.21	3,304	254,700
	New Brunswick	Fredericton	29.87	5,301	217,722
	Nova Scotia	Halifax	40.43	5,075	366,243
	PEI	Charlottetown	32.92	4,678	254,510
	New FL & LBD	St John's	42.96	5,546	146,600
	Yukon	Whitehorse	49.37	19,619	447,360
	NW Territories	Yellowknife	55.87	42,303	402,384

Note the crime numbers above are relative in nature although the lower the (overall crime) figure, the safer the city tends to be, and readers are encouraged to visit these websites for further details.

B) Correlation calculations between the crime statistics and average home prices were done: And they show insignificant correlation i.e. crime doesn't appear to be a major decider of home prices on the city level (although it may be important on the neighborhood level within a city).



We have used Toronto as the benchmark (1.00) and compared the rest of the cities to it, and the results are shown in the chart above. Simple observations include:

1) While there seems to be cases (e.g. Regina, Saskatoon) which support the notion that the higher the crime level, the lower the average home price, there are also cases (e.g. Toronto versus Montreal) where the higher crime city also has higher average home price.

2) Crime levels appear to be relatively pronounced in smaller cities yet this isn't universal as the case of Quebec City shows.

3) Perhaps choosing the bigger metropolitans may offer a better (lower) crime per city's amenities, economic scale, and employment opportunity unit ratio.

As for your humble author, he is fine with Toronto.

The case for charging a vacancy tax: from the angle of city administration

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Shares a similar reason (Courtesy of https://www.publicdomainpictures.net)

COVID 19 notwithstanding, readers who have had cruising experience would know that cruise companies tend to charge more for a single passenger than two, not on a per person basis but in total, unless there are discounts and so on. Why? Because cruise ships work on a two person cabin (they like to call it stateroom) module, and a single passenger occupying the cabin would have to pay not only for the “absentee second passenger” but also for the potential onboard extra spending which such a second passenger might have done.

Now what does this have to do with the so-called vacancy tax which some cities wish to impose on landlords who leave their residential properties empty for long? Everything and your humble author shall explain:

A) From the investor / landlord’s perspective, he or she might have felt the city’s economic wellbeing has been served via the (residential) real estate investment, be this, if Canadian cities are involved, C$1M or C$10M. Furthermore, the fact that this investor-landlord doesn’t occupy or rent the property out might make him feel ‘generous’ insofar the related condo/management/maintenance fees, where any, and realty taxes are paid. Needless to say, the investor-landlord would deem it important that his right to ownership, in this case, leaving the property unoccupied, is preserved.

B) Yet from the city administration’s angle, a different story might emerge. First, purchase prices, no matter how astronomically high, aren’t factored into the city’s GDP (Gross Domestic Product), a rough yet handy measure of economic activities. Only the one-time service fees e.g. broker’s, lawyer’s, and taxes e.g. stamp duty, land transfer tax, rendered in the course of the transaction / investment process are included in the GDP formula. Second, if the city is already suffering from housing shortage, an unoccupied property will only add pressure for the administration. As for the various property ownership fees and realty taxes, their amounts are usually low, plus these would have been expensed anyway whether the property is occupied or not i.e. the investor-landlord's 'generous' payments of such items means little or nothing to the city administration.

Thus, city politics and ideology notwithstanding, vacancy tax is touted, not as a solution but more as deterrence in the hope that investor-landlords will be enticed to either occupy the property themselves or rent it out to someone else, given the heavier carrying costs.

Cities want more residents; be they earners or consumers, they will add to the city's GDP. On a per household basis, this could range from say C$30K per year to well over C$100K per year. Only on such GDP volumes can city governments derive the taxes they need. Absentee landlords won't be helpful in this regard. And we haven't even started to mention the impact on employment.

Imagine a town with 100,000 residential units which 90% are owned by absentee landlords who prefer to leave these units vacant. These properties might very well be highly priced but the town will be ghostly.

In short, three capital letters are all that matter to the city administration in this regard, GDP.

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