

Zeppelin's Real Estate Tech

3Q 2023: A Real Estate Newsletter by Zeppelin Partners Limited

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Inflation, deflation, interest rate trends, the ongoing war in Ukraine, geopolitical tensions, US presidential races, and housing tension in Canada. What else? Ask Chat-GPT.

In this issue:

- **Canada: car prices versus home prices**
- **A question of perceived purchasing power?**
- **City of Toronto residential real estate: charts and tables**

"Not truly knowing the future makes life more interesting."

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 likely comprising real estate developers, investors, fund managers, financiers, owners, users, top executives, senior managers, prominent academics and related professionals. Our content 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 [27th](#) year and [108th](#) 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, is now Honorary Advisor to Zeppelin Partners Limited. He will continue to write this newsletter.

Readers are to seek professional consultation where required and Zeppelin including its associates and consultants do not accept any responsibility for losses arising out of the usage of the newsletter. Copyrights rest with Zeppelin and/or the author(s). Opinions expressed by invited guest writer(s) do not necessarily imply consensus or agreement on our part.

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 had been 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 Institution 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

We welcome enquiries from interested parties and could be reached as follows:

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Canada: car prices versus home prices

Real Estate Tech, 3Q 2023

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| Years | Av Home \$Prices | 2012=1.00 | Av Car \$Prices | 2012 = 1.00 | Home\$ / Car\$ |
|-------|------------------|-----------|-----------------|-------------|----------------|
| 2012 | \$353,084 | 1.00 | 33,169 | 1.00 | 10.65 |
| 2013 | \$391,359 | 1.11 | 34,277 | 1.03 | 11.42 |
| 2014 | \$406,156 | 1.15 | 35,185 | 1.06 | 11.54 |
| 2015 | \$453,256 | 1.28 | 36,486 | 1.10 | 12.42 |
| 2016 | \$470,482 | 1.33 | 38,374 | 1.16 | 12.26 |
| 2017 | \$497,196 | 1.41 | 40,252 | 1.21 | 12.35 |
| 2018 | \$472,510 | 1.34 | 42,146 | 1.27 | 11.21 |
| 2019 | \$518,018 | 1.47 | 43,567 | 1.31 | 11.89 |
| 2020 | \$605,545 | 1.72 | 45,157 | 1.36 | 13.41 |
| 2021 | \$711,237 | 2.01 | 47,254 | 1.42 | 15.05 |
| 2022 | \$625,304 | 1.77 | 52,200 | 1.57 | 11.98 |

The home and the family car(s) are probably the two biggest ticket items for most Canadian households in terms of non-regular or non-frequent expenditures (the more regular or frequent expenditures are education, health, internet, mobile phone service, heating, and so on).

As such, we have compiled a very rough table showing the average prices of homes and cars across Canada from 2012 to 2022 (see above). Data sources include StatsCan and the Canadian Real Estate Association. Homes can involve both new and secondary market homes, while cars are new ones. Stating the obvious, these are national numbers and are likely to differ from provincial and metro numbers. Nonetheless, we hope these rough numbers would give a feel of how the prices of these two big ticket items have been trading:

- 1) Overall, home prices have gone up more than car prices across Canada.
- 2) Home prices have ups and downs, thus more volatile, while car prices have gone only one way, i.e., up.
- 3) Homes, of course, have an investment element in them while cars, extremely vintage ones aside, are mostly depreciating assets.
- 4) Generally, an average priced home can be traded for 10 to 12 average priced cars although at times, the ratio can reach 15, as seen in 2021. That is, even an older home may maintain a certain purchasing power over time, while a car will see its purchasing power diminishing over time.
- 5) Technologically, the average home may have a slower increment in terms of advances due to older homes have been included in the data (home upgrading notwithstanding), while new cars usually come with (at least some of) the state-of-the-art features prevalent in the year they are being sold.

Given many Canadian households have two cars, and using the average numbers above, that would mean on average, a typical household would have invested in a \$625,000 home and purchased two cars for around \$104,000. Of course, those households which can do with one car, or even none, may invest more in a home, or for that matter in other assets, if they so wish.

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A question of perceived purchasing power?

Real Estate Tech, 3Q 2023

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Courtesy of www.istockphoto.com and commons.wikimedia.org

Since the Financial Tsunami, many countries have been adopting various forms of money easing, or quantitative easing if you like, not to mention the easing spikes in recent years to combat the depressive economic effects from Covid19. In turn, such easing appears to have landed us in the current inflationary environment, and economists and financiers alike are now debating whether this round of inflation will last, or if deflation will take over at some point.

Your humble author is no such economics, financial, or monetary expert, yet believes if money easing can REALLY solve economics, financial, or monetary crises, humanity then doesn't have to worry about the economy and the financial and monetary markets anymore. Sounds too good to be true.

Regardless of whether inflation or deflation will rule the day in future, or a combination of both, the increased "perceived" purchasing power brought about by money easing since 2008, be this perception arises as a result of real asset price increments, stock increments, antique investment increments, vintage item investment increments, increased cash in the bank, and so on and so forth, will have a rude awakening when inflation or deflation strikes hard, i.e., beyond control, even if government will at that point wish otherwise or try to do something.

For inflation and deflation, while are kind of opposites, share the same effect, that is, the (perceived) purchasing power of your income and wealth will be reduced. Inflation works by increasing prices of things you buy, while deflation works by reducing your income and wealth so you end up buying less things.

What rude awakening? Look at the two photos above: the left is the perceived, the right reflects the awakening.

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City of Toronto residential real estate: charts and tables

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(Courtesy of www.publicdomainpictures.net)

We have collected data from the website of the Toronto Regional Real Estate Board (<https://trreb.ca/>) focusing on the **City of Toronto's** residential real estate market (largely the secondary market). These data start from April 2017 and end in August 2023. Rough charts and tables were compiled and some of these are listed below:

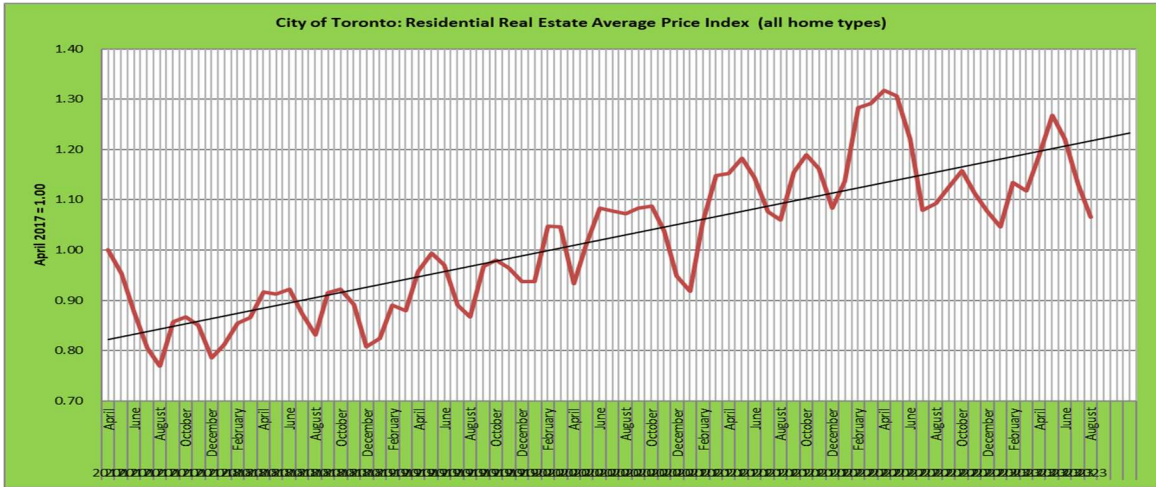
1) From April 2017 (the last price peak) to August 2023 price changes in percentages, major home types

| City of Toronto : | Apr17 to Aug23 |
|-------------------|----------------|
| All Home Types | 6.57% |
| Detached | 3.59% |
| Semi-detached | 11.93% |
| Townhouse | 31.65% |
| Apartment | 25.29% |

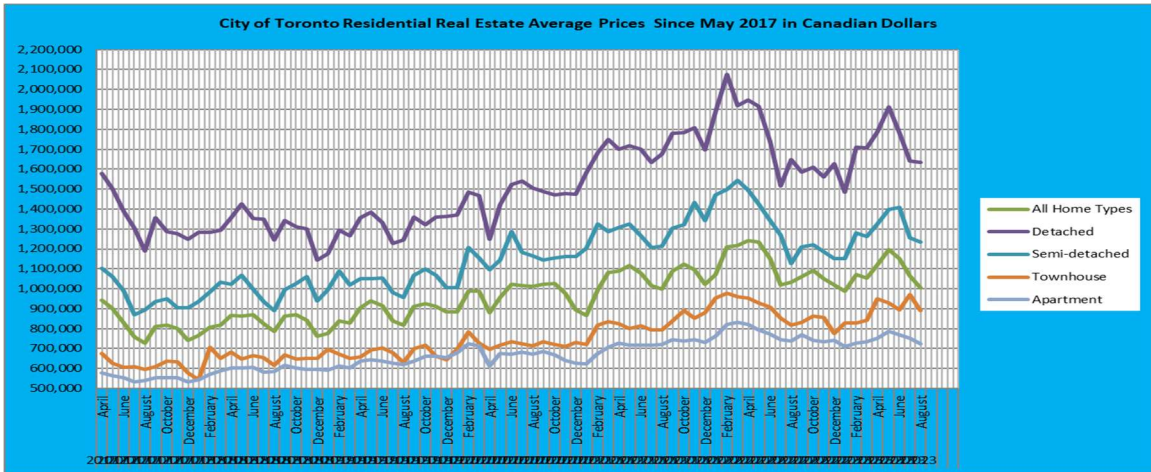
2) July 2023 versus August 2023 average and median home prices, major home types

| Metro Region | Sub-district | | Jul-23 Average C\$ | Aug-23 Average C\$ | Difference C\$ Jul-Aug23 | Percentage +/- (Aug-Jul)/Jul 2023 | Jul-23 Median C\$ | Aug-23 Median C\$ | Difference C\$ Jul-Aug23 | Percentage +/- (Aug-Jul)/Jul 2023 | |
|---------------|----------------|-------|-----------------------|-----------------------|-----------------------------|---|----------------------|----------------------|-----------------------------|---|--------|
| Metro Toronto | All Home Types | | 1,066,184 | 1,005,945 | -60,239 | -5.65% | 866,550 | 810,000 | -56,550 | -6.53% | |
| | Detached | | 1,641,045 | 1,635,145 | -5,900 | -0.36% | 1,330,000 | 1,320,000 | -10,000 | -0.75% | |
| | Semi-detached | | 1,257,086 | 1,235,723 | -21,363 | -1.70% | 1,177,500 | 1,117,500 | -60,000 | -5.10% | |
| | Townhouse | | 970,427 | 889,482 | -80,945 | -8.34% | 850,000 | 830,000 | -20,000 | -2.35% | |
| | Apartment | Condo | | 753,520 | 724,549 | -28,971 | -3.84% | 660,000 | 650,000 | -10,000 | -1.52% |
| Metro West | All Home Types | | 1,041,432 | 993,866 | -47,566 | -4.57% | 906,750 | 860,500 | -46,250 | -5.10% | |
| | Detached | | 1,483,704 | 1,465,197 | -18,507 | -1.25% | 1,300,000 | 1,316,000 | 16,000 | 1.23% | |
| | Semi-detached | | 1,096,655 | 1,064,727 | -31,928 | -2.91% | 1,042,500 | 999,999 | -42,501 | -4.08% | |
| | Townhouse | Condo | | 971,771 | 836,235 | -135,536 | -13.95% | 819,950 | 818,800 | -1,150 | -0.14% |
| | Apartment | Condo | | 675,911 | 703,516 | 27,605 | 4.08% | 624,000 | 620,000 | -4,000 | -0.64% |
| Metro Central | All Home Types | | 1,096,484 | 1,047,457 | -49,027 | -4.47% | 800,000 | 750,000 | -50,000 | -6.25% | |
| | Detached | | 2,497,273 | 2,515,353 | 18,080 | 0.72% | 2,100,000 | 2,035,000 | -65,000 | -3.10% | |
| | Semi-detached | | 1,477,500 | 1,609,422 | 131,922 | 8.93% | 1,360,000 | 1,395,000 | 35,000 | 2.57% | |
| | Townhouse | Condo | | 1,071,639 | 1,016,327 | -55,312 | -5.16% | 985,000 | 972,500 | -12,500 | -1.27% |
| | Apartment | Condo | | 805,296 | 760,485 | -44,811 | -5.56% | 699,000 | 688,000 | -11,000 | -1.57% |
| Metro East | All Home Types | | 1,031,378 | 941,975 | -89,403 | -8.67% | 999,999 | 910,000 | -89,999 | -9.00% | |
| | Detached | | 1,260,966 | 1,217,702 | -43,264 | -3.43% | 1,180,000 | 1,133,000 | -47,000 | -3.98% | |
| | Semi-detached | | 1,248,808 | 1,118,535 | -130,273 | -10.43% | 1,202,500 | 1,112,716 | -89,784 | -7.47% | |
| | Townhouse | Condo | | 827,119 | 800,341 | -26,778 | -3.24% | 790,000 | 780,000 | -10,000 | -1.27% |
| | Apartment | Condo | | 614,827 | 606,781 | -8,046 | -1.31% | 569,000 | 577,500 | 8,500 | 1.49% |

3) From April 2017 to August 2023 home price trend



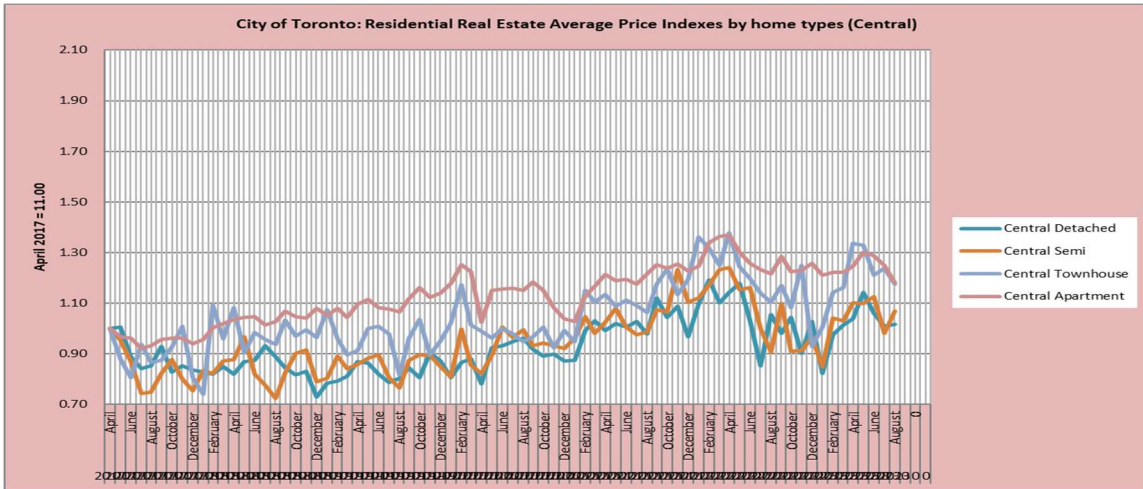
4) From April 2017 to August 2023 average prices of major home types



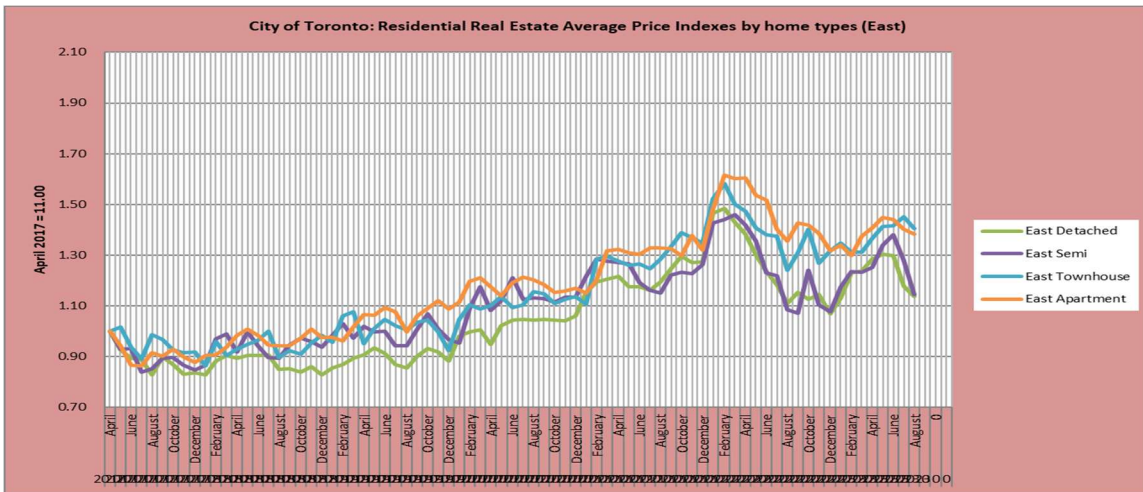
5) From April 2017 to August 2023 average price trends, major home types, West Toronto



6) From April 2017 to August 2023 average price trends, major home types, Central Toronto



7) From April 2017 to August 2023 average price trends, major home types, East Toronto



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