

Zeppelin's Real Estate Tech

1Q 2024: A Real Estate Newsletter by Zeppelin Partners Limited

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Solar eclipse on 8th April 2024 and glad the Earth has only one Sun. Else, very dizzying.

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- **Hong Kong and Toronto residential real estate: correlated until recently**
- **Investing in a foreign real estate market: start with macro**
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"Culture reflects the collective character of a community."

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**. This newsletter is now into its **28th** year and **110th** 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 continues 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 or reference to 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 the City University of Hong Kong and had spoken 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

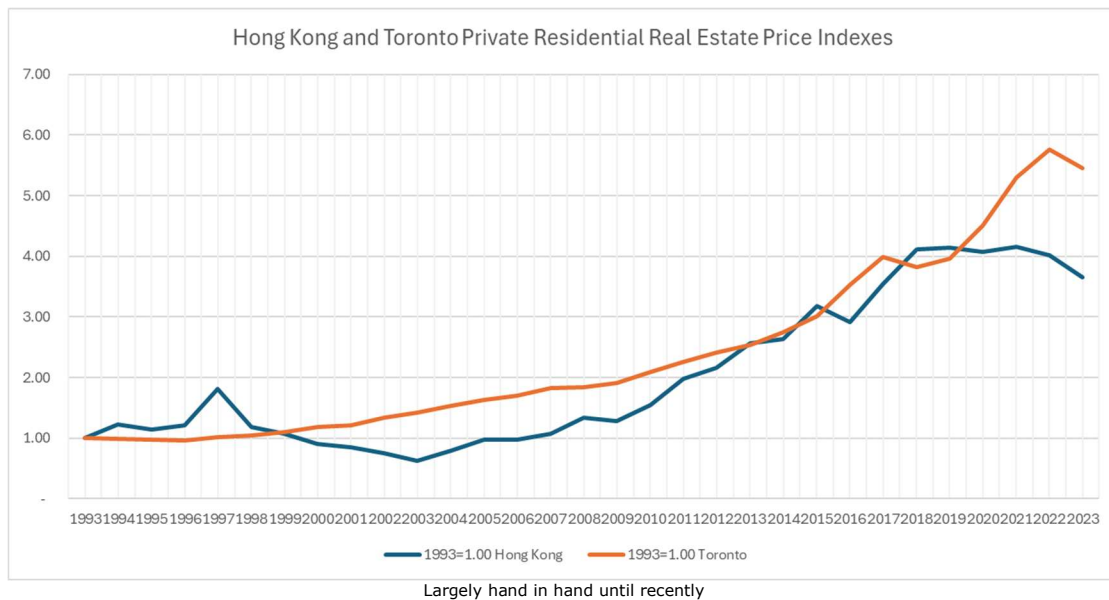
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Hong Kong and Toronto residential real estate: correlated until recently

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A few friends were interested in how the two real estate markets have been fairing, and so your humble author tried his best to respond. The chart above is self-explanatory and data were abstracted from the websites of the Ratings and Valuations Department and Toronto Regional Real Estate Board for Hong Kong and Toronto respectively. No adjustments were made for currency exchange rates. The period went from 1993 to 2023 noting:

- a) The Hong Kong data was based on the mid-year price index of all floor size categories of private residential units, while the Toronto data on the annual average price of residential real estate.
- b) Toronto has been expanding geographically during the period, i.e., the average price has increasingly been covering more neighborhoods and residential units.

Your humble author has also calculated how correlated, or not, the two markets have been, and the table below shows the correlations between the two for different periods of time:

Correlations between:				R
Hong Kong	Toronto		Full period	0.92
Hong Kong	Toronto		2008 to 2023	0.88
Hong Kong	Toronto		2014 to 2023	0.68
Hong Kong	Toronto		2020 to 2023	-0.30

Roughly speaking, the two markets are quite correlated during the full period yet demonstrate a decreasing trend in correlation over time. However, since 2020, the two markets diverged, ending in a negative correlation. This said, since these are annual average indices or prices, the results herein can only be used as very rough reference.

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Investing in a foreign real estate market: start with macro

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Foreign to your humble author: Miami, Martinique, and Rio de Janeiro (Courtesy of your humble author)

Foreign here means you aren't familiar with the real estate market being considered and / or the city isn't your ordinary place of residence and business. There are no hard and fast rules but the following may help when contemplating to invest in an unfamiliar foreign market:

- 1) Analyze the market's economics: to assess the prospect, the likely returns, the risks, the capital required, the ease or difficulty of financing, the economic cycle, the probable scale, the key economic factors, and so on. If not, it will affect the bottom line.
- 2) Find out the market's operating environment: including but not limited to its geopolitics, politics, government, law, taxation, urban planning, city administration, and so on. Especially if the market's official language isn't the one you use routinely, and the legal system isn't exactly the one you usually work on. This can range from city to country levels. If not, you may be unpleasantly surprised later by bureaucracy.
- 3) Find out the market's real estate environment: including but not limited to its real estate cycle, the scale, the supply, the demand, the competition, the planning process, the building application process, the building codes, the time needed to build or close a deal, the availability of required professionals and contractors, their competencies, their charges, the real estate-specific fees and charges, the availability of suitable projects and properties, and so on. Exchange rates and swaps, too. If not, you might underestimate the resources, effort, and time needed to invest successfully, in particular development projects.
- 4) Check out potential and prospective investment partners: if you are to invest in partnership with one or more local entities. Their competency, their business integrity, their experience, their financial capacity, and so forth. If not, there could be subsequent bad chemistry.
- 5) Assess if you have the proper scale of investment: because if your scale of investment is too small for the market, your overheads and operating costs will affect the anticipated return negatively. Assess also if you need a competent local manager to oversee the investments and if such a person can reasonably be found.

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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 March 2024. Rough charts and tables were compiled and some of these are listed below:

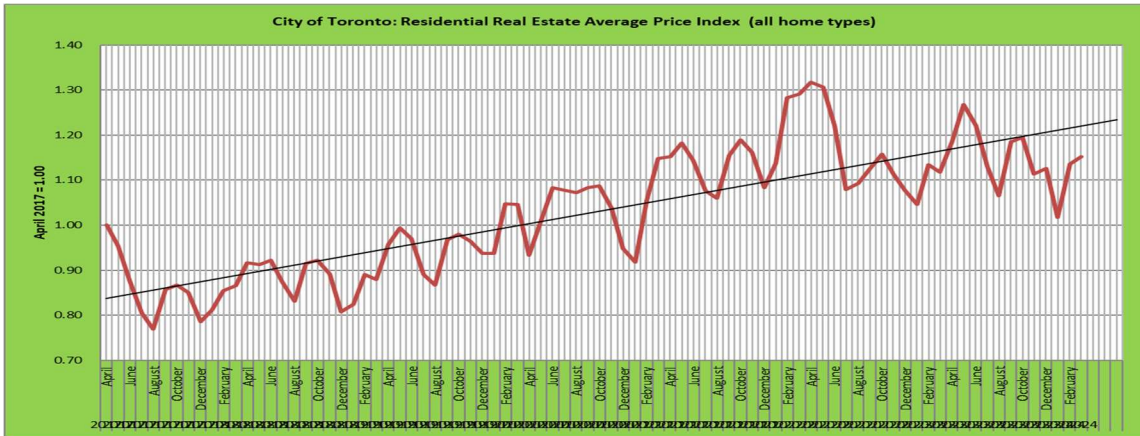
1) From April 2017 (the last price peak) to March 2024 price changes in percentages, major home types

City of Toronto:	Apr17 to Mar24
All Home Types	15.16%
Detached	8.23%
Semi-detached	17.79%
Townhouse	27.26%
Apartment	26.13%

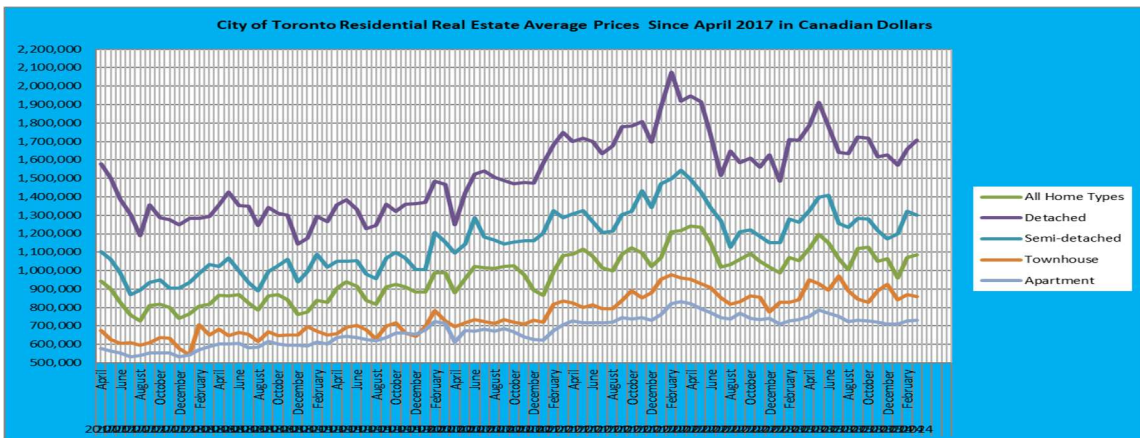
2) February 2024 and March 2024 average and median home prices, major home types

Metro Region	Sub-district		Feb-24 Average C\$	Mar-24 Average C\$	Difference C\$ Feb-Mar24	Percentage +or- (Mar-Feb)/Feb 2024	Feb-24 Median C\$	Mar-24 Median C\$	Difference C\$ Feb-Mar24	Percentage +or- (Mar-Feb)/Feb 2024
Metro Toronto	All Home Types		1,072,528	1,087,017	14,489	1.35%	875,000	885,000	10,000	1.14%
	Detached		1,657,026	1,708,437	51,411	3.10%	1,349,500	1,400,000	50,500	3.74%
	Semi-detached		1,319,884	1,300,403	-19,481	-1.48%	1,212,893	1,169,000	-43,893	-3.62%
	Townhouse	Condo	870,571	859,817	-10,754	-1.24%	815,000	811,250	-3,750	-0.46%
	Apartment	Condo	726,608	729,392	2,784	0.38%	645,000	657,150	12,150	1.88%
Metro West	All Home Types		1,021,957	1,032,032	10,075	0.99%	929,000	935,051	6,051	0.65%
	Detached		1,411,997	1,489,836	77,839	5.51%	1,250,500	1,299,999	49,499	3.96%
	Semi-detached		1,189,776	1,104,413	-85,363	-7.17%	1,052,500	1,029,500	-23,000	-2.19%
	Townhouse	Condo	822,334	848,327	25,993	3.16%	822,000	835,000	13,000	1.58%
	Apartment	Condo	652,693	658,029	5,336	0.82%	590,000	619,000	29,000	4.92%
Metro Central	All Home Types		1,129,875	1,160,638	30,763	2.72%	788,000	815,000	27,000	3.43%
	Detached		2,475,678	2,375,519	-100,159	-4.05%	2,215,000	2,099,000	-116,000	-5.24%
	Semi-detached		1,592,596	1,605,372	12,776	0.80%	1,540,000	1,360,000	-180,000	-11.69%
	Townhouse	Condo	1,026,453	953,986	-72,467	-7.06%	923,800	860,000	-63,800	-6.91%
	Apartment	Condo	780,284	785,061	4,777	0.61%	690,000	695,500	5,500	0.80%
Metro East	All Home Types		1,027,477	1,007,485	-19,992	-1.95%	985,000	966,786	-18,214	-1.85%
	Detached		1,326,502	1,283,545	-42,957	-3.24%	1,195,000	1,169,944	-25,056	-2.10%
	Semi-detached		1,231,522	1,276,148	44,626	3.62%	1,200,527	1,226,250	25,723	2.14%
	Townhouse	Condo	738,634	744,790	6,156	0.83%	730,000	729,950	-50	-0.01%
	Apartment	Condo	618,628	612,644	-5,984	-0.97%	573,500	580,000	6,500	1.13%

3) From April 2017 to March 2024 home price trend



4) From April 2017 to March 2024 average prices of major home types



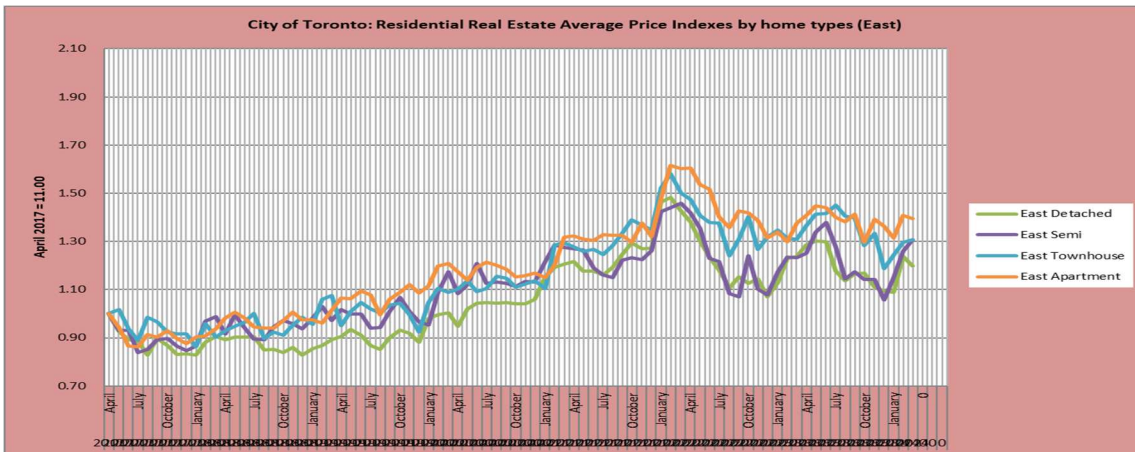
5) From April 2017 to March 2024 average price trends, major home types, West Toronto



6) From April 2017 to March 2024 average price trends, major home types, Central Toronto



7) From April 2017 to March 2024 average price trends, major home types, East Toronto



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