Dr. Gordon and I agree about one thing: demand for housing impacts its price. In the recent Globe and Mail [op-ed](https://www.theglobeandmail.com/opinion/article-the-supply-crisis-in-canadas-housing-market-isnt-backed-up-by-the/) he argues that only "cheap credit, foreign ownership, speculation and high rental demand" can explain the significant housing price increases observed in Toronto and Vancouver since 2010. The article goes to great lengths to disabuse the reader of the "supply narrative [which] has been endlessly repeated". Many of the arguments are unconvincing and muddled statements about supply elasticities undermine its credibility. Most troubling though is the article's dismissal of the vast and high-quality empirical research which has demonstrated the importance of supply-side factors in housing markets.

Let me preface my concerns by acknowledging that the op-ed gets several things right. First, short-run price changes are almost always demand-driven in housing markets given the lag between the permitting process, housing construction, and completions. Housing policies that only target supply will be hampered in their effectiveness. Second, a supply-friendly narrative is beneficial to developers and certain politicians stemming from obvious financial benefits. However it should be noted some incumbent land-owners also have a financial interest in preventing development.

The op-ed points to several pieces of data as a rationale for why supply constraints are an insufficient explanation for the large price increases seen since 2010 in Toronto and Vancouver. These include a lack of regulatory changes in either city and "rates of housing construction [that] have remained very strong". Economists determine how responsive markets are to price changes by measuring their "elasticity". Specifically, the elasticity of supply measures the percentage change in supply to a given percentage change in price. This concept is especially important when understanding housing affordability since the higher the elasticity of supply, the smaller the long-run price increase will be when demand increases. The op-ed's suggestion that a constant rate of construction is a good sign when prices are skyrocketing completely misses the point! Quite the opposite, they are signs of an unresponsive housing market.

In 2018 the CMHC released an exhaustive [report](https://www.cmhc-schl.gc.ca/en/data-and-research/publications-and-reports/examining-escalating-house-prices-in-large-canadian-metropolitan-centres) which showed that supply responsiveness in Toronto and Vancouver was half the level it was relative to Calgary and a quarter relative to Montreal and Edmonton. The report also showed the importance of demand factors. This is to be expected: both supply and demand impact market prices. The aggregate number of housing starts (adjusted by population) from 2010-19 was only 18% higher in Vancouver compared the previous decade. Toronto actually saw a decrease in population-adjusted starts between the two decades (-22%). While these numbers will vary depending on the measure of supply used (starts versus completions, downtown versus metropolitan area, etc), it is clear that the overall supply response in these cities has paled in comparison to the effective doubling of prices which has occurred.

Regulations which restrict the quantity and composition of housing construction are problematic because they make the supply of housing more inelastic. Contrary to the suggestion of the op-ed, constraints to the housing supply caused by regulations are problematic even if they are not getting worse. As noted in the above CMHC report, Toronto and Vancouver have the most stringent land-use regulations which includes longer approval times, development fees, and rezoning requirements. Market expectations about future supply availability may also impact the price a buyer is willing to pay.

The article is right to state that supply constraints are often blamed for the sustained price increases seen in many major North American cities. Anyone who has an interest in urban economics will be aware of the now dozens of peer-reviewed papers published in top economics journals that have demonstrated that housing elasticities and regulatory constraints are a significant factor in determining the long-run price level of housing as well as relative prices between cities. For now classic studies see [here](https://www.nber.org/papers/w10124), [here](https://www.aeaweb.org/articles?id=10.1257/mac.20170388), [here](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=930200), or [here](https://www.sciencedirect.com/science/article/abs/pii/S0094119007001180). Regional studies also abound (see [here](https://www.sciencedirect.com/science/article/abs/pii/S016604621100072X) or [here](https://www.sciencedirect.com/science/article/abs/pii/S0094119008000582)). Nor are these findings limited to the [United States](https://onlinelibrary.wiley.com/doi/abs/10.1111/ecoj.12213). Even [studies](https://academic.oup.com/qje/article-abstract/125/3/1253/1903664?redirectedFrom=fulltext) which focus on geographical rather than regulatory constraints come the conclusion: supply elasticities matter for housing prices. Despite the mountain of empirical evidence the op-ed bizarrely states that the supply narrative is "evidence-averse", the "emperor [having] no clothes", and that "*I have yet to encounter a single academic peer-reviewed article which documents a substantial causal link between supply-side factors and housing unaffordability* ***in Canada***" .

The fact there are no Canadian peer-reviewed papers is misleading, at best. There are enough similarities between housing markets in Canada and the United States to be confident that supply factors impact prices. Furthermore, a simple Google search reveals that numerous Canadian policy papers have discussed the impact of supply-side factors on housing prices including reports from [Ryerson](https://tinyurl.com/y4l5fpao), [The Fraser Institute](https://tinyurl.com/yyqcr5bm), and the aforementioned CMHC report. Unfortunately, as is often the case in empirical economics, most of the research is centred on the United States due to the quality of the datasets available. For example the US has the well-developed [Wharton Residential Land Use Regulatory Index](https://tinyurl.com/y6se265b).

A final frustration with the supply-side impotence viewpoint is that it seems unable to answer basic economic questions. Consider the statement: [T]here is no clear relationship between the prevalence of single-detached zoning in Canada and the level of affordability in a city... Of course, that pattern exists not because single-detached zoning causes improved affordability. Rather, it’s because strong demand pressures tend to cause both denser housing patterns and higher prices. That's fine. But a worldview that has no mechanism for the importance of supply will be unable to answer seemingly obvious thought experiments. For example, if the construction of new housing was banned for the next decade would this make housing markets more, less, or equally affordable? One can argue whether policies that target the demand or supply side are more effective. The answer to this question surely varies depending on the city being discussed and the point in time. Arguing that the quantity of housing units is unimportant for the price level belies the empirical literature, economic theory, and common sense.