1 Introduction

Taxes and restrictions on foreign purchases of residences have been implemented in multiple jurisdictions worldwide with the stated purpose of making homes more affordable for domestic residents. For example, in extending a ban on foreign purchases of Canadian residential real estate, a government press release stated: "For years, foreign money has been coming into Canada to buy up residential real estate, increasing housing affordability concerns in cities across the country, and particularly in major urban centres. Foreign ownership has also fueled worries about Canadians being priced out of housing markets in cities and towns across the country."

There are theoretical and empirical reasons to expect foreign buyer taxes to succeed in bringing down local housing prices, many of which are detailed in a comprehensive study by **favilukisVanNieuwerburgh**. The disincentive to purchase homes should reduce the pool of buyers and lower willigness to pay among remaining foreign buyers. This reduction in prices hurts landlords and incumbent property owners through lost property value and rents, but makes homes more affordable for renters. There may be an associated loss of construction jobs, and the analysis in **favilukisVanNieuwerburgh** does not consider the effect of reciprocal taxes on domestic residents who may wish to purchase property overseas.²

Existing studies of the impact of the entry and exit of foreign buyers on local home prices are mixed, with some finding large effects in the predicted direction, as summarized in davidoffZheng. LiShenZhang, gorbackGlobalCapitalLocal2020, pavlovImmigrationFlows, and BadarinzaRamadorai find that within metropolitan areas, submarkets exposed to foreign buyers see larger price increases when the types of foreign buyers prone to buy in those submarkets face increased incentives to buy overseas. DachisDurantonTurner, klevenBest, kopczukMurroe, and davidoffLeigh find, as a general matter, that increasing transaction taxes on housing purchases leads to fewer transactions and lower prices. HartleyForeign, andalfattoEstimatingEffectMetro2023, DuYinZhang, and pavlovForeignBuyer collectively find that foreign buyer taxes in Australia, Canada, and New Zealand led to lower

As favilukisVanNieuwerburgh observe, foreign buyers may not leave homes empty, but rather rent them out to locals. In their calibration, this changes the social welfare effect of foreign buyers from negative to slightly positive. The effect of out of town buyers is moderate because local investors are so price sensitive in their demand for rental properties and out-of-town buyers represent a small share of overall capital investment. In this way, foreign buyers represent a slightly positive form of capital accumulation. This is a relevant case, as British Columbia has imposed significant taxes on empty homes and vacation properties in urban areas while also imposing significant taxes on foreign buyers, and the Canadian federal government has both imposed taxes on empty homes owned by foreigners and has temporarily banned the purchase of single residences by foreigners.

At the time of writing, construction in Canadian cities, particularly condominiums in the most expensive cities, Vancouver and Toronto, has slowed dramatically. This has led some

prices.

 $^{^{1}}$ gOC.

²It is not obvious that a target country would wish to reciprocate to disincentivize the host country's tax. For example, China, the source of most foreign buying in Canada prior to the recent spate of taxes (per **ctvNews**) has made efforts to discourage capital flight.

observers to suggest that the taxation of foreign buyers has overshot, leading to a negative supply response larger than the positive demand response on prices from foreign buying, such that locals have been adversely affected. It is thus worthwhile asking whether there is empirical evidence supporting the idea that foreign buyers, particularly in the presence of empty homes taxes, may have positive welfare effects and their taxation adverse effects on housing affordability for locals.

There are several channels through which foreign buyers could have positive affordability effects. First, per **favilukisVanNieuwerburgh**, foreign buyers may rent houses to locals, particularly in the presence of an empty homes tax.

Second, foreign buyers may purchase condominiums in the presale phase of condominium development and then assign their contracts prior to completion. The presence of foreign presale purchasers would raise presale prices, encouraging the supply of condominiums, but with no increase in demand for occupied space. The net effect of that form of investment should be positive for affordability, with an adverse competition effect for locals who wish to occupy homes purchased through the presale channel.

A third possibility is that foreign buyers could have a beneficial effect on housing affordability for most locals if they have a relative preference for quality, and if there is a high degree of vertical differentiation within buildings. To see this channel, consider a limiting case in which top-floor penthouse units have a high level of quality, and all homes below the penthouse have a lower level of quality. For simplicity, assume all buildings are 10 storeys tall. If steady state, construction supply is infinitely elastic at a price of \$X, then if foreign investors are permitted in a market, then the price to locals will be:

$$.9p_l(q) + .1p_f = X (1)$$

$$p_l = \frac{X - .1p_f}{.9}.\tag{2}$$

Without foreign buyers, the price of lower-quality units would be $p_l = \frac{X - .1p_d}{.9}$. In that way, luxury foreign demand could crowd out local luxury demand, but subsidize local consumption of generic units.

2 Do foreign buyers leave homes empty?

Per **specTax2019**, of 3,709 foreign owners deemed subject to the empty homes tax in 2018, 1,205 transitioned to renting their homes out in 2019, 1,413 sold their property, 951 remained subject to the tax, and only 66 transitioned to primary residence.

3 Do foreign buyers specialize in the most luxurious units within buildings?

Figure ?? presents suggestive evidence on the question of whether foreign buyers may offer implicit subsidies to local buyers of standard-quality units through abnormally high willingness to pay for higher quality units, for example, those with prime views.

The data are taken from condominium resales in Greater Vancouver between
text/variance_decomposition.png