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Michael Lewyn *Touro College*

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DOWNTOWN CONDOS FOR THE RICH: NOT ALL BAD

Michael Lewyn*

I. INTRODUCTION

The revitalized downtown is a twenty-first century cliché. Skid rows have been replaced by yoga studios and fancy coffee shops. For better or for worse, downtown revitalization has happened in many North American cities.¹ But as the demand for urban housing has increased, housing costs have risen-especially in downtowns and other urban neighborhoods.² Some new housing units are too expensive for anyone but the very wealthy.³ Buyers⁴ of these high-cost units include not only wealthy residents who wish to move downtown, but also nonresidents who wish to use housing as an investment rather than a residence.⁵ Some commentators use this apparent fact as an argument against new market-rate housing generally; they claim that new housing will be purchased by out-of-town investors rather than used by local residents and that those investors will leave housing units empty, rather than renting them out.⁶ A related argument is that, even if market-rate condos are purchased by local residents, any market-rate housing will increase housing costs by increasing the cost of land, regardless of its effects upon housing supply.7 Some commentators also argue that even if high-end condos do not increase housing costs, they create a variety of other negative externalities, such as increased urban inequality, money laundering, and energy consumption.8

This Article suggests that these fears are overstated. Through a survey of the academic and popular literature as well as a review of relevant data, this Article suggests that the growth of high-end condominiums is likely to increase supply and hold down costs for local residents. Part I of the Article discusses the background of the debate, including the increased popularity of downtown life, the explosion of urban housing costs in some cities, and the growth of high-cost condos. Part II critiques the claim that the growth of high-end condos will fail to lower housing costs

^{*} Associate Professor, Touro College, Jacob D. Fuchsberg Law Center. B.A., Wesleyan University; J.D., University of Pennsylvania; L.L.M., University of Toronto. I would like to thank Rodger Citron, Robert Ellickson and Christopher Elmendorf for their helpful comments, as well as the participants in the 2019 Association for Law, Property and Society (ALPS) conference who heard me speak about this Article.

^{1.} See infra notes 18-24 and accompanying text.

^{2.} See infra notes 25–29 and accompanying text.

^{3.} See infra notes 39-41 and accompanying text.

^{4.} Of course, many new housing units are apartments. This Article, however, focuses on for-sale units because these units are used as investments by their buyers. *See infra* Part III. If a unit is for rent, by contrast, the only investor is likely to be the landlord. *See infra* Part III.

^{5.} See infra notes 42-48 and accompanying text.

^{6.} See infra note 50 and accompanying text.

^{7.} See infra Part II.

^{8.} See infra Part III.

and suggests that this claim is wrong because (1) at least some of these condos are purchased or rented by local residents; and (2) even if this was not the case, these condos might lower housing costs by shifting demand away from older housing units that might otherwise be purchased by out-of-town investors. The Article further demonstrates that even if out-of-town investment has increased housing demand, a vacancy tax would limit this demand more effectively than restrictive zoning. Finally, Part III discusses other externalities allegedly caused by these condos and argues that those externalities do not justify limits on condo construction.

II. BACKGROUND

In the first half of the twentieth century, every large U.S. city gained population.⁹ But in the late twentieth century, the U.S.'s metropolitan population shifted to suburbia. Of the U.S. cities with over half a million people in 1950, all but four lost population between 1950 and 2010.¹⁰ This statistic actually underestimates the extent of suburbanization because some cities gained population only by annexing fast-growing suburbs.¹¹

At first, the neighborhoods closest to cities' traditional cores declined most rapidly: for example, downtown Detroit lost nearly two-thirds of its population between 1950 and 2000,¹² and downtown El Paso lost 60 percent of its population.¹³ During the 1970s alone, downtowns lost 10 percent of their population.¹⁴ A Brookings Institute report showed that 38 out of 45 downtowns studied lost

^{9.} See THE WORLD ALMANAC AND BOOK OF FACTS 614 (Sarah Janssen, ed., 2016) (detailing how every U.S. city with over half a million people in 1950 gained population in preceding decades.).

^{10.} *Id*.

^{11.} See Nathaniel Baum-Snow, Did Highways Cause Suburbanization?, 122 Q. J. ECON. 775, 777 (2007) (explaining that a select group of U.S. central cities gained population in late twentieth century, but if post-1950 annexations are excluded, such cities lost 17 percent of their population); Robert E. Lang & Meghan Zimmerman Gough: Growth Counties: Home to America's New Suburban Metropolis, in REDEFINING URBAN AND SUBURBAN AMERICA: EVIDENCE FROM CENSUS 2000, at 61–62 (Alan Berube, Bruce Katz, Robert E. Lang, eds., 2006) (explaining how Houston gained population only by annexing vast amounts of territory.).

^{12.} See Clifford C. Schrupp, *Gentrification and Fair Housing Laws: The Detroit Experience*, 4 J. L. SOC'Y 13, 16 (2002) (detailing Detroit's population decline from 3769 people to 1301). By contrast, the entire city of Detroit lost 44 percent of its population; a significant but nevertheless smaller portion. See Janssen, supra note 9, at 614 (detailing Detroit's population declined from 1,849,568 to 1,027,974).

^{13.} See Ray Telles, Forgotten Voices: Gentrification and Its Victims, 3 SCHOLAR 115, 119 (2000) (detaling El Paso population decline of 60 percent between 1960 and 1990). Cf. NYC OPENDATA, New York City Population by Borough, 1950-2040 (2012), https://data.cityofnewyork.us/City-Government/New-York-City-Population-by-Borough-1950-2040/xywu-7bv9/data [https://perma.cc/T3AA-E47F] (detailing Manhattan's population decline from 1.96 million in 1950 to

^{1.428} million in 1980, and then its ncrease in subsequent decades).

^{14.} See Eugene L. Birch, *Who Lives Downtown*, METRO. POLICY PROGRAM (Nov. 2005) at 1, 5, https://www.brookings.edu/wp-content/uploads/2016/06/20051115_Birch.pdf [https://perma.cc/9JQ7-9C4M] (combining data from forty-five cities).

population during that decade.¹⁵ Even in fast-growing cities such as Dallas, San Antonio, and Phoenix,¹⁶ downtown population declined.¹⁷

But in recent decades, this trend has reversed. In the 1990s, three-quarters of downtowns gained population,¹⁸ including downtowns in declining cities such as Baltimore, Pittsburgh, and Cleveland.¹⁹ In the twenty-first century, this trend continued. In metropolitan areas with over five million people, the population living within two miles of the downtown area increased by 13.3 percent between 2000 and 2010.²⁰ The repopulation of urban cores is not limited to the United States: for example, in the United Kingdom, "Inner London" (the part of London close to the city's historic core) has grown and become more affluent, while more suburban "Outer London" has become poorer.²¹ Similarly, Canadian downtowns such as those of Toronto and Vancouver are growing more rapidly than other urban neighborhoods.²²

As downtowns have grown, they have also become more affluent. In the fifty largest U.S. metropolitan areas, per capita income within a mile of downtown grew by over 40 percent—from just over \$32,000 to just over \$46,000.²³ By contrast, incomes grew slowly or not at all in areas three or four miles from downtown.²⁴ Additionally, as the demand for urban housing has increased, its cost has increased as well: since 2000, housing prices in city centers have increased 50 percent more rapidly than metropolitan housing prices as a whole.²⁵ In New York City, for

20. By "downtown," the author refers to City Hall of the region's major city. See, e.g., U.S. CENSUS BUREAU, PATTERNS OF METROPOLITAN AND MICROPOLITAN POPULATION CHANGE: 2000 TO 2010, at 27.

21. See KAT HANNA & NICHOLAS BOSETTI, INSIDE OUT: THE NEW GEOGRAPHY OF WEALTH AND POVERTY IN LONDON 1, 3, 6–9 (2015) ("Inner London boroughs had the fastest growth rates" while "[p]overty rates have increased in Outer London and decreased in Inner London.").

22. See Alex Ballingall, Census Shows Big Population Gains in Toronto, Milton and Brampton, TORONTO STAR (Feb. 8, 2017), https://www.thestar.com/news/canada/2017/02/08/census-shows-bigpopulation-gains-in-toronto-milton-and-brampton.html [https://perma.cc/ZR58-TLHB] (Toronto's "sharpest population gains are concentrated downtown."); Jen St. Denis, With Population Boom, Vancouver's Downtown and East-Side Voters Could Sway Municipal Election Results, TORONTO STAR (Oct. 16, 2018), https://www.thestar.com/vancouver/2018/10/16/with-population-boom-vancouversdowntown-and-east-side-voters-could-sway-municipal-election-results.html [https://perma.cc/SYBH-ZGZS] (downtown Vancouver's voter population grew more rapidly than population of areas west of downtown).

23. See Luke Juday, *The Changing Shape of American Cities*, UNIV. OF VA.: DEMOGRAPHICS RESEARCH GROUP, http://statchatva.org/changing-shape-of-american-cities/ [https://perma.cc/3AUU-HZZV] ("Per capita income" graph.).

24. Id.

^{15.} Id.

^{16.} See U.S. CENSUS BUR., Available City Population Data (2005) http://physics.bu.edu/~redner/projects/population/ [https://perma.cc/5F4Q-HXKE] (describing growth of these cities).

^{17.} See Birch, supra note 14, at 5.

^{18.} See id.

^{19.} See id. (downtown data); Janssen, supra note 9, at 614 (showing citywide population decreases for many cities).

^{25.} See U.S. Housing Demand Pendulum Swinging Back Towards City Centers, FITCH RATINGS (Aug. 12, 2015), https://www.fitchratings.com/site/pr/989360 [https://perma.cc/2ZA8-933R].

example, housing prices tripled in Manhattan between 2000 and 2017, while merely doubling in suburb-like Staten Island.²⁶

In the majority of American regions, housing costs have risen more rapidly in downtowns than in other urban neighborhoods.²⁷ For example, between 2008 and 2018, the median sale price for housing in downtown Chicago rose by over \$200,000 (from \$656,000 to \$900,000) while the sale price in the rest of the city rose by only \$5,000.²⁸ And in Detroit, downtown housing prices rose by over \$70,000, while sale prices in the rest of the city rose by only \$2,000.²⁹

To a much greater extent than homeowners, renters face a housing crisis. In 2014, the U.S. homeownership rate dropped to its lowest rate in twenty years, which caused increased demand for rental housing.³⁰ The share of American households that rent is at a fifty-year high at 37 percent (up from 32 percent in 2004).³¹ In nine of the nation's eleven largest cities, there has been double-digit growth in the percentage of renters since 2006.³² Supply has not caught up with demand; the national rental vacancy rate hit a thirty-year low in 2016.³³

Because of this combination of stagnant supply and rising demand, rent rose nationwide over the past decade.³⁴ Rent increases have been especially rapid in prosperous urban centers. For example, since 2006, Manhattan rents have increased by 22.3 percent, while rents in suburb-like Staten Island have increased by only 5.6 percent.³⁵ Similarly, rents in all of New York City increased by 15 percent, while rents in that city's suburbs increased by only 4 percent.³⁶ In the city of San Francisco, rents nearly doubled between 2000 and 2017.³⁷ In urban Washington, D.C., rents

27. See Eliza Theiss, The Rise and Fall of the American Downtown - A Look into the Home Price Evolution of the Nation's Urban Cores in the Decade Since the Downturn, PROP.SHARK (Jan. 14, 2019), https://www.propertyshark.com/Real-Estate-Reports/2019/01/14/the-rise-and-fall-of-the-american-downtown-a-look-into-the-home-price-evolution-of-the-nations-urban-cores-in-the-decade-since-the-downturn/ [https://perma.cc/J8BU-YBPV] (showing that housing prices in roughly two-thirds of downtowns surveyed higher than their city's average home price).

30. See Andrea J. Boyack, Equitably Housing (Almost) Half A Nation of Renters, 65 BUFF. L. REV. 109, 116 (2017).

31. Vicki Been, City NIMBYS, 33 J. LAND USE AND ENV'T L. 217, 238 (2018).

32. Boyack, supra note 30, at 116.

33. Been, supra note 31, at 239.

35. NYU FURMAN CTR., *supra* note 26 at 22.

36. INGRID GOULD ELLEN & BRIAN KARFUNKEL, RENTING IN AMERICA'S LARGEST METROPOLITAN AREAS 19 (2016).

^{26.} See N.Y.U FURMAN CTR., STATE OF NEW YORK CITY'S HOUSING AND NEIGHBORHOODS IN 2017, at 1, 71, 101 (2018) ("Index of Housing Price Appreciation" showed increase from 100 to 314 in Manhattan, and from 100 to 218 in Staten Island). I call Staten Island "suburb-like" because it has only 8,200 people per square mile. *Id.* This population density is far below the density of Manhattan, which is just over 72,000. *Id.* at 71. Or, of the city as a whole, at just over 28,000. *Id.* at 34.

^{28.} Id.

^{29.} Id.

^{34.} *Id.* In 53 largest metro areas, rents rose at an annualized rate of 1.9 percent above inflation between 2012 and 2015. *Id. See also* Boyack, *supra* note 30, at 118 (demonstrating how rents rose 15 percent between 2009 and 2014, outpacing wages).

^{37.} See BAY AREA MARKET REPORTS, SF MULTI-FAMILY RESIDENTIAL MARKET IN 2020 (2020) (explaining that rent rose from \$1874 in 2000 to \$3326 in 2017). By contrast, rents nationwide have grown by a little over 30 percent. See, e.g., PEW CHARITABLE TRUSTS, AMERICAN FAMILIES FACE A GROWING RENT BURDEN 6–7 (2018).

rose by 27 percent between 2006 and 2014, while suburban rents rose by only 8 percent.³⁸

The most expensive urban buildings are so costly that they are unaffordable not only to the average middle-class renter or condo buyer, but also to the professional making a high six-figure (or even a low seven-figure) income. For example, at 432 Park Avenue in Manhattan, all but four of the forty-three units that sold in 2018 cost more than \$10 million—and the most expensive unit sold for \$82 million.³⁹ Similarly, the most expensive condominium in downtown Los Angeles, as of early 2019, was on sale for \$60 million⁴⁰—a price far beyond the reach of even a professional earning \$1 million per year.⁴¹

Some of the demand for high-end housing comes from people who do not intend to live in the condos fulltime—or at all. For example, one study shows that in twelve new condominium buildings in downtown Boston, 64 percent of unit owners do not claim a tax exemption available to persons who use a building as their primary residence, which is evidence that these buyers might not in fact reside in their buildings full-time.⁴² The study, written for the Institute for Policy Studies (IPS),⁴³ describes these multi-million dollar buildings as "wealth storage properties"⁴⁴ because they can be used by wealthy investors to diversify their holdings.⁴⁵ Some of these investors reside outside North America; for example, one purchaser bought sixteen units in downtown Boston's new Millennium Tower condos on behalf of Chinese investors.⁴⁶ In Manhattan, the share of home purchases by out-of-town buyers increased from 9.6 percent to 13.6 percent between 2004 and 2016.⁴⁷

42. See Chuck Collins & Emma de Goede, *Towering Excess: The Perils of the Luxury Real Estate Boom for Bostonians*, INEQUALITY.ORG 10 (2018) (noting this fact and describing buildings surveyed).

43. See id. at ii. IPS is a progressive policy organization. See Peter J. Spiro, The Military is Not Everything, 32 TEMP. INT'L & COMP. L.J. 97, 98 (2018) (describing IPS as "iconically progressive"); W. Hays Parks, Air War and The Law of War, 32 A.F.L.REV. 1, 179 n. 534 (1990) (describing IPS as "farleft").

^{38.} Ellen & Karfunkel, supra note 36, at 19.

^{39.} See Past Sales for Building: 432 Park Avenue, STREETEASY, https://streeteasy.com/building/432-park-avenue-new_york#tab_building_detail=2 [https://perma.cc/8UW4-4NTG] (under "Units" section; click on the "Past Sales" tab and sort by price).

^{40.} ZILLOW, Price and Tax history for 601 South Main Street, https://www.zillow.com/homes/for_sale/Los-Angeles-

CA/condo,apartment_duplex_type/2093994595_zpid/12447_rid/priced_sort/34.338333,-

^{117.971879,33.703206,-118.850785}_rect/9_zm/0_mmm/ [https://perma.cc/TL7F-7B9L] (navigate to the "Home value" tab and scroll down to the "Price and tax history" information).

^{41.} According to Zillow, the likely mortgage for this condominium was just over \$238,074 per month. *Id.* For a household earning \$1 million per year (or \$83,333 per month) the mortgage would cost more than twice the household's monthly pretax income.

^{44.} Collins & de Goede, *supra* note 42, at 2.

^{45.} *Id.* at 7 ("Across the world, skyscrapers and mansions are rising in globalized super-cities, a form of "wealth storage" for the world's wealthy who are seeking to diversify their asset holdings.").

^{46.} Tim Logan, Foreign Buyers at Millennium Tower Show That Boston is on a World Stage, BOS. GLOBE (Aug. 29, 2016), https://www.bostonglobe.com/business/2016/08/29/with-millennium-tower-boston-reaches-new-heights-foreign-money-magnet/keC5sjXE546tpvGmGsTVIM/story.html [https://perma.cc/YV2H-JSU2].

^{47.} See Dan Bertolet, Stop Blaming Foreign Home Buyers, SIGHTLINE INST. (Jul. 5, 2017), https://www.sightline.org/2017/07/05/stop-blaming-foreign-home-buyers/ [https://perma.cc/4RU6-HAC8] (citing Jack Favilukis & Stijn van Niuwerburgh, Out-of-Town Buyers and City Welfare, J. FIN.

Commentators blame these investors for rising housing costs for two reasons. First, every investor to enter a housing market increases demand, and thus increases housing prices.⁴⁸ Second, some commentators claim that investor-owned properties are especially likely to go unused rather than be rented out, thus reducing housing supply.⁴⁹ A significant minority of the general public seems to agree. One survey asked Californians why housing is unaffordable in California and gave respondents eight potential reasons; "foreign buyers" came in fourth, with 16 percent of the "vote."⁵⁰ Public concern over foreign condominium purchases is not limited to the United States. In Canada, the provincial government of British Columbia and the city government of Toronto have both imposed taxes targeting real estate owned by nonresidents.⁵¹

Nonresident real estate investment is also controversial for reasons unrelated to housing costs. For example, if out-of-town investors rarely use their condominiums, those condominiums may remain empty, thus reducing street life and making a neighborhood more dull.⁵² The IPS report claims that new luxury housing generally has other negative side effects such as: increased inequality because residents of new housing are likely to be wealthy individuals;⁵³ increased potential that housing may be used for money laundering because some of these condos "are

48. See Collins & de Goede, supra note 42, at 18.

49. Cf. Sam Roberts, Homes Dark and Lifeless, Kept by Out-of-Towners, N.Y.TIMES (July 6, 2011), https://www.nytimes.com/2011/07/07/nyregion/more-apartments-are-empty-yet-rented-or-owned-census-finds.html [https://perma.cc/24DX-PCWD] (claiming that in one six-block stretch of Manhattan, half of all apartments "are occupied for two months or less," and suggesting that one reason for the lack of occupation is that "the market for high-end apartments has rebounded. Manhattan continues to attract foreign investors seeking a haven.").

50. Liam Dillon, *Experts Say California Needs to Build A Lot More Housing. But the Public Disagrees*, L.A. TIMES (Oct. 21, 2018), https://www.latimes.com/politics/la-pol-ca-residents-housing-polling-20181021-story.html [https://perma.cc/5TE2-AK56].

51. See Guardian Staff, Vancouver Declares 5% of Homes Empty and Liable for New Tax, THE GUARDIAN (Mar. 7, 2018), https://www.theguardian.com/world/2018/mar/08/vancouver-declares-5-of-homes-empty-and-liable-for-new-tax [https://perma.cc/QSC2-XGYW]. Cf. Josef Filopowicz, Focus on Foreign Buyers Overlooks Source of Most Housing Demand in Canada, FRASER INST. (Dec. 20, 2017), https://www.fraserinstitute.org/blogs/focus-on-foreign-buyers-overlooks-source-of-most-housing-

demand-in-canada [https://perma.cc/UX8R-YERT] (explaining that nonresidents own 3.4 percent of all residential properties in greater Toronto, and 4.8 percent in metropolitan Vancouver). The wisdom of these taxes will be addressed *infra* Part III-A-4.

52. See Tanya Powley & Lucy Warwick-Ching, "Stateless" Super-Rich Wear Out Their Welcome in Posh Enclaves, CNBC (May 1, 2012), https://www.cnbc.com/id/47248862 [https://perma.cc/QG4M-YWK6] (quoting concerns over "low density of street-life" in areas inhabited by the wealthy); Collins & de Goede, *supra* note 42, at 19 (claiming that high-end neighborhoods become "luxury ghost towns" with "no stoop life, less foot traffic, fewer customers for neighborhood businesses, and weakened neighborly bonds").

⁽forthcoming 2021) (manuscript at 77), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2922230 [https://perma.cc/G6S3-BTXR]).

^{53.} See Collins & de Goede, supra note 42, at 18–19. The authors also note that foreign investors may be able to use their investments to obtain U.S. citizenship because under U.S. law a foreigner who invests over \$500,000 in certain areas may more easily obtain a path to citizenship. *Id.* at 22.

purchased with cash by shell companies, raising red flags about the legality and source of funds;"⁵⁴ and increased energy consumption.⁵⁵

III. HIGH-END CONDOS AND HOUSING COSTS

Dozens of economic studies conclude that places with restrictive zoning tend to have higher housing costs than more permissive cities because of the law of supply and demand: when the government restricts the supply of housing, prices will normally increase.⁵⁶ For example, a study by California legislative staff found that rents grew more slowly in places with higher levels of housing construction.57 Between 1980 and 2013, the housing stock in urban, coastal California counties grew by 34 percent, while the housing stock in the fastest-growing fifth of metropolitan counties across the United States grew by 99 percent.⁵⁸ Rents rose by 50 percent in the first group of counties, but only by 18 percent in the second group.⁵⁹ Similarly, Jeffrey Zabel and Maurice Dalton found that in Massachusetts communities, increases in minimum lot sizes were usually followed by price increases.⁶⁰ A study by Vanessa Brown Calder sought to use the growth of zoning case law as a means of measuring regulation; she found, based on a regression analysis, that in "44 of 50 individual states, rising annual land-use regulation is associated with rising real average home prices over a 35-year period."61 This economic scholarship suggests that cities can reduce housing costs by loosening zoning laws in order to allow more housing.

However, a variety of commentators claim that the law of supply and demand does not apply to high-end urban housing. They argue that new supply will

57. See generally MAC TAYLOR, LEGIS. ANALYST'S OFF., PERSPECTIVES ON HELPING LOW-INCOME CALIFORNIANS AFFORD HOUSING (2016).

58. Id. at 9.

59. *Id.* at 8. The study defines the "coastal urban counties" as counties in California metropolitan areas with over 500,000 people.

61. Vanessa Brown Calder, Zoning, Land-Use Planning, and Housing Affordability, CATO INST. 7 (2017).

^{54.} Id. at 19.

^{55.} Id. at 22-23.

^{56.} See Christopher S. Elmendorf, Beyond the Double Veto: Housing Plans as Preemptive Intergovernmental Compacts, 71 HASTINGS L.J. 79, 87–88 (2019); Been, supra note 31, at 227–29. See generally Daniel Shoag, Removing Barriers to Accessing High-Productivity Places, THE HAMILTON PROJECT (2019), https://www.brookings.edu/wp-content/uploads/2019/01/Shoag_PP_web_20190128.pdf [https://perma.cc/3893-ECZA] (detailing that, by as early as 2005, forty studies had found such a relationship).

^{60.} See Been, supra note 31, at 228 (also citing other studies). To the extent that these housing restrictions affect prices, they have a variety of other negative effects. High housing costs keep productive workers out of high-cost cities, thus limiting workers' incomes and economic growth generally. *Id.* at 230–32. Because workers who cannot afford high-cost cities are likely to be poorer than other workers, high housing costs also increase segregation by income. *Id.* at 233–34. Restrictive zoning also increases automobile-related pollution and greenhouse gas emissions because such zoning often reduces density, and people who live in less compact neighborhoods tend to drive more because in low-density areas, residences are further from each other and from jobs. *Id.* at 235. *See also* Michael Lewyn, *You Can Have It All: Less Sprawl and Property Rights Too*, 80 TEMP. L. REV. 1093, 1097 (2007) (explaining the latter point in more detail).

be snapped up by wealthy investors who will either fail to rent out the units⁶² or will raise housing costs by raising land costs.⁶³ Each of these arguments will be addressed in turn.

A. Does Global Investment Prevent New Housing from Lowering Rent?

One commentator writes that new housing will not contain housing costs "when a fuller picture of demand is painted that includes foreign direct investment in apartments that remain vacant"⁶⁴—in other words, that foreign investment will soak up new housing supply, thus preventing new supply from reducing housing costs. This argument makes sense only if (1) new urban condominiums are invariably occupied by investors; (2) the investors do not rent out new housing; and (3) the investors will not purchase other housing in the absence of the new housing. Each of these assumptions will be discussed below.

1. Do Non-Residents Really Buy New Housing?

Even in the most expensive real estate markets, nonresidents are only a small percentage of homebuyers. As noted above, nonresidents engage in 13.6 percent of Manhattan home purchases⁶⁵ and about 3 percent of California purchases.⁶⁶ Of course, this figure includes older homes as well as new units, so it might be the case that nonresidents purchase a small proportion of overall units and yet purchase a much larger proportion of new units.⁶⁷

Little data is available on sales of new units. As noted above, the IPS study suggested that 64 percent of units in downtown Boston's newest, most expensive condo buildings were owned by nonresidents.⁶⁸ If this is the case, more than one-third of the units *do* belong to Boston residents, which means that these units actually *increase* regional housing supply. In other words, if a new condo building has 300 units and only 100 are owned by residents, the building has increased regional

^{62.} See infra Part III-A.

^{63.} See infra Part III-B.

^{64.} Jim Russell, Illusion of Local: Why Zoning for Greater Density will Fail to Make Housing More Affordable, PAC. STANDARD (June 14, 2017), https://psmag.com/social-justice/illusion-local-zoning-greater-density-will-fail-make-housing-affordable-85313 [https://perma.cc/RG9Y-SXLM].

^{65.} See Bertolet, supra note 47 and accompanying text.

^{66.} See Matt Levin, Are Foreign Investors Driving Up Real Estate in Your California Neighborhood?, VENTURA CTY. STAR (Mar. 22, 2018), https://www.vcstar.com/story/money/business/ 2018/03/22/foreign-investors-driving-up-real-estate-your-california-neighborhood/440319002/

[[]https://perma.cc/G3T3-7YMX] (stating that the California Association of Realtors estimates that 3 percent of purchases went to international buyers, but their chief economist notes that some realtors might not know citizenship status of clients).

^{67.} However, this has not been the case in at least one major city: In London, overseas buyers' share of the supply of new housing is only slightly greater than their share of the overall housing supply. *See* Isabelle Fraser, '*Almost No Evidence' of London Homes Owned by Foreign Buyers Being Left Empty,* THE TELEGRAPH (June 14, 2017), https://www.telegraph.co.uk/property/house-prices/almost-no-evidence-london-homes-owned-foreign-buyers-left-empty/ [https://perma.cc/LB78-YBLW] (asserting that 17.9 percent of new units are purchased by overseas buyers); Favilukis & Van Nieuwerburgh, *supra* note 47 at 11("A study by the [London] Mayoral office shows that 13% of properties sold in 2014–16 were bought by foreigners.").

^{68.} See Collins & de Goede, supra note 42, at 2.

housing supply by 100 units. That being said, the Boston survey is a very small sample, and more research from other cities would be useful.

Most new housing is not as expensive as these high-end buildings. The IPS study profiled twelve buildings with an average condominium price just over \$3 million.⁶⁹ However, according to Zillow, only 32 (out of a total of 325) condominiums built after 2016 in the city of Boston sold for that much.⁷⁰ Even this statistic overestimates the impact of high-end condos, since some new housing units are in apartment houses rather than condominiums, and thus not likely to be used as investment properties.⁷¹ If only the most expensive units are attractive to global investors, the overwhelming majority of new market-rate housing units still expand housing supply for local residents even if a few pricey condominiums are used by nonresidents.⁷²

In sum, the claim that new market-rate housing will be taken over by outof-town investors seems implausible for two reasons. First, the most expensive buildings are only a small minority of new housing units. Second, it is not clear that the most expensive condominiums are consistently purchased by nonresidents.

2. Do Investors Rent Out Housing?

Some of the public concern over high-end housing is based on fear that speculators will purchase housing and then leave it vacant instead of occupying it or renting it out, thus creating a wasteland of empty "ghost apartments." For example, one U.S. law review article complains about "the ever-growing presence of ghost buildings . . . [buildings that are] astonishingly expensive, mostly foreign owned [and] . . . left largely empty while fewer and fewer young people can afford to buy or even rent in the city."⁷³ And a British newspaper article states that "[a]lmost two-thirds of homes in the Tower, a 50-storey apartment complex in London, are in foreign ownership . . . many of the homes are barely occupied, with some residents saying they only use them for a fraction of the year."⁷⁴ The latter article notes that owners of the units include a former Russian senator, a former Nigerian government minister, and an Indonesian banker.⁷⁵

^{69.} Id. at 9.

^{70.} See ZILLOW, Boston, MA, Real Estate, https://www.zillow.com/homes/for_sale/ condo_type/50000-_price/196-_mp/2016-_built/pricea_sort/42.415979,-70.886193,42.210846,-71.20926_rect/11_zm/ [https://perma.cc/8S3N-NANC] (select "More"; then enter "2016" and "2021" in

[&]quot;year built").

^{71.} See supra note 4.

^{72.} Of course, less expensive buildings might attract out-of-town investment as well. *See* Favilukis & Van Nieuwerburgh, *supra* note 46, at 11 (noting that half of units bought by foreigners in London were inexpensive enough that they "could be bought by typical first-time buyers"). But, if such out-of-town investment affected most of a city's housing supply, a huge proportion of a city's housing stock would be used as second homes—a result not supported by data. *See infra* notes 97–101 and accompanying text (in most cities, no more than 2 percent of units are used for seasonal or occasional use).

^{73.} Jeffrey R. Boles, *Million Dollar Ghost Buildings: Dirty Money Flowing Through Luxury Real Estate Markets*, 45 REAL EST. L. J. 476, 500 (2017); *see also* Gelinas, *supra* note 49.

^{74.} Robert Booth & Helena Bengtsson, *The London Skyscraper that is a Stark Symbol of the Housing Crisis*, THE GUARDIAN (May 24, 2016), https://www.theguardian.com/society/2016/may/24/revealed-foreign-buyers-own-two-thirds-of-tower-st-george-wharf-london [https://perma.cc/S63W-FZTC].

^{75.} Id.

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If every unit of a high-end condominium was purchased by foreign investors who then refused to rent those units out, the units obviously would not add to housing supply and would not lower housing costs. But if these condo units were rented out to local residents, these condos would actually increase local housing supply. In turn, local residents' use of the new units would reduce demand within the preexisting housing supply and would lower rents for older units.⁷⁶

There is little available data on whether foreign investors rent out their units; however, a couple of studies suggest that most units owned by nonresidents are rented out to local residents. A study performed by several London School of Economics (LSE) scholars found that in London, there was "almost no evidence of units being left entirely empty—certainly less than 1%."⁷⁷ In fact, the LSE study cited a 2012 study showing that 58 percent of foreign investors intended to rent out their property, 27 percent intended to occupy it regularly, and the rest intended to use the property as a second home.⁷⁸

The authors of this study independently interviewed developers and real estate agents. The agents suggested that "over 90% and often 95% of units were occupied with the vast majority being tenanted."79 The authors interviewed over a dozen building managers and developers in new buildings with high levels of foreign ownership; some stated that 90 percent or more of units were occupied, while one stated that 70 percent were fully occupied and 30 percent were used as second homes.⁸⁰ The authors also interviewed concierges from four large new buildings; they estimated that between 50 and 75 percent of units were rented out, and no more than 0-2 units per building were entirely unoccupied.⁸¹ Based on this data, the authors estimated that roughly 70 percent of foreign-owned units were rented to Londoners.⁸² Since less than 20 percent of London's new housing units were foreignowned, only about 6 percent of London's new housing units (or about 1200 units from 2015–2016) were used by foreigners at all, including the units that those foreigners actually lived in.83 The authors also explained the reasons behind the perceptions of high vacancy in the newest developments: passersby may think that a unit is vacant when it is in fact not yet completely built, and even after a building is ready for occupancy, selling the units may take years.⁸⁴

One possible flaw in the LSE study is that it is based on estimates by real estate industry participants, rather than on actual vacancy data. In contrast, a study

^{76.} See infra Part II-A-5(b) and accompanying text describing "filtering" of housing caused by new units.

^{77.} KATH SCANLON, CHRISTINE WHITEHEAD, FANNY BLANC WITH ULISES MORENO-TABAREZ, THE ROLE OF OVERSEAS INVESTORS IN THE LONDON NEW-BUILD RESIDENTIAL MARKET: FINAL REPORT FOR HOMES FOR LONDON 2 (London School of Economics and Political Science, 2017).

^{78.} Id. at 15–16. Also cited was a 2013 analysis by real estate agents finding that "85% of international buyers purchased properties as an investment and let them out." Id.

^{79.} Id. at 17.

^{80.} *Id.* at 18 tbl. 6. One building manager did not specify a percentage of occupancy but stated that the average occupancy was 190 days a year. *Id.*

^{81.} Id. at 19 tbl. 7.

^{82.} Id. at 28.

^{83.} *Id.*

^{84.} Id. at 19.

of Vancouver electricity used by Ecotagious, an energy company,⁸⁵ supports the LSE study's conclusion that foreign investment has not led to a surge in vacant units. This study defined unoccupied units as those with minimal electricity consumption.⁸⁶ The study found that only 4.8 percent of all housing units in Vancouver were unoccupied.⁸⁷ If these unoccupied apartments were a result of foreign investment, the non-occupancy rate would have risen over the past decade when foreign investment in Vancouver soared.⁸⁸ Yet Vancouver's non-occupancy rate was no higher in 2014 than in 2002.⁸⁹ Some press coverage suggests that downtown Vancouver is especially notorious for "ghost apartments" owned by nonresidents.⁹⁰ If this were really the case, downtown Vancouver's non-occupancy rate would have grown in recent years. Yet according to the Ecotagious study, downtown Vancouver's non-occupancy rate has actually declined since 2002 (from 6.9 percent to 6.0 percent),⁹¹ and the downtown's non-occupancy rate is only slightly higher than that of the city as a whole.⁹² The lack of change in electricity usage suggests that investor-owned ghost apartments in Vancouver are uncommon.

Thus, it seems unlikely that a significant number of new condo units are completely unused. On the other hand, some big-city housing units are used as part-time second homes. In fact, about 40 percent of Manhattan's vacant apartments (roughly 50,000 housing units, or 5.8 percent of the borough's housing supply) are vacant and used for "seasonal, recreational or occasional use" according to the Census Bureau.⁹³ It could be argued based on this fact that investors looking for second homes are soaking up a significant share of the new housing supply.

But it is unclear whether this is the case because overall vacancy numbers do not tell us *which* housing units are being used as second homes. Are these units

92. See supra text accompanying note 87 (4.8 percent vacancy rate for the city as a whole).

93. The exact number was 49,924 in 2017. Explore Census Data, Vacancy Status: 2017: ACS 1-Year Estimates Detailed Tables (TableID: B25004), *in American Community Survey*, UNITED STATES CENSUS BUREAU. This number was about 5 percent of Manhattan's overall housing supply. Explore Census Data, Occupancy Status: 2017: ACS 1-Year Estimates Detailed Tables (TableID: B25002), *in American Community Survey*, UNITED STATES CENSUS BUREAU (borough had 886,384 housing units).

^{85.} See ECOTAGIOUS, STABILITY IN VANCOUVER'S HOUSING UNIT OCCUPANCY (Feb. 2016) https://vancouver.ca/files/cov/stability-in-vancouver-housing-unit-occupancy-empty-homes-report.pdf [https://perma.cc/8UGG-3FFU].

^{86.} Id. at 8-10.

^{87.} Id. at 12.

^{88.} See Robert Sroka, Two Models for Indigenous Land Use Development Outside of Vancouver, British Columbia, 12 ALB. GOVT. L. REV. 255, 274 (2019) (noting that the last twenty years have "seen a massive influx of capital from East Asia into the regional residential real estate market"; such foreign demand has contributed to Vancouver becoming "Canada's most expensive residential real estate market"); Yuen Pao Woo, In Vancouver, Foreign Capital is Part of the Housing Solution, THE GLOBE MAIL (Feb. 19, 2018), https://www.theglobeandmail.com/opinion/foreign-capital-is-part-of-the-housingsolution/article38017421/ [https://perma.cc/RQ3U-EKH5] (reporting that between 2007 and 2017, "prices of single detached Vancouver houses rose by 130 percent").

^{89.} ECOTAGIOUS, supra note 85, at 12.

^{90.} See Mike Raptis, 15% of Downtown Vancouver Condos Sit Empty, Turning Areas into Ghost Towns: Study, THE PROVINCE (Mar. 22, 2013), https://globalnews.ca/news/386369/15-of-downtownvancouver-condos-sit-empty-turning-areas-into-ghost-towns-study/ [https://perma.cc/N73J-UDMG] (citing a variety of estimates).

^{91.} ECOTAGIOUS, supra note 85, at 25 graph 14.

the newest, most luxurious units? Or are they spread more evenly throughout the city's housing supply?⁹⁴ In any event, the impact of second homes on the citywide housing supply is quite small. In New York City as a whole, 79,001 housing units are vacant and used for seasonal or occasional use—only 2.2 percent of the 3.5 million housing units available in the city.⁹⁵ Moreover, the number of occasionally used housing units is even smaller in other high-cost cities—a fact which suggests that second homes are even less likely to affect housing costs in those cities than in New York. In Boston (the second most expensive urban rental market in the United States)⁹⁶ only 1.5 percent of housing units are in the "seasonal or occasional use" category.⁹⁷ In Los Angeles (the fifth most expensive)⁹⁸ only 0.9 percent of housing units fall into this category.⁹⁹ If second-home buyers were a major cause of high rents, these markets would be less expensive.

3. What If No High-End Housing Is Built?

The claim that new high-end housing fails to increase housing supply is based on two assumptions—one that is more plausible and one that is less plausible. The plausible assumption is that the presence of out-of-town investors may raise

95. See sources cited supra note 93.

^{94.} In addition, we have no way of knowing whether these units are owned by nonresident investors or by local suburbanites who just want to sleep in the city a few nights a week rather than suffering through a long commute to their suburban homes. I also note that many of these units may be used as short-term rentals through Airbnb and similar sites, and thus actually meet consumer demand for housing just as a more traditional long-term rental might. *See* INSIDE AIRBNB, *New York City*, http://insideairbnb.com/new-york-city/ [https://perma.cc/7J3M-CHTL] (listing 19,696 "entire home or apartment" Airbnb options in New York City during 2021; in addition, a roughly equal number of spare rooms are rented out in apartments occupied by the Airbnb "landlord" or by other Airbnb users).

^{96.} Geoff Boeing & Paul Waddell, Insight into Rental Housing Markets Across the United States: Web Scraping and Analyzing Craigslist Rental Listings, 37 J. OF PLAN. EDUC. & RSCH. 457, 470 (2017) (providing that Boston has the second highest rent per square foot among urban markets, behind New York).

^{97.} See sources cited supra note 93 (4440 units out of the city's 293,538 housing units in this category).

^{98.} The only markets with higher rent are New York, Boston, San Francisco, and Honolulu. Boeing & Waddell, *supra* note 96, at 470–471.

^{99.} See sources cited supra note 93 (13,587 units out of the city's 1,496,661 housing units in this category). In fact, some less expensive markets have higher rates of second-home use than New York and Los Angeles. For example, metro Atlanta's rent per square foot is only \$0.74, which is less than half that of Los Angeles and about one-fourth that of New York. Boeing & Waddell, supra note 96, at 470. Yet 10,242 out of Atlanta's 245,063 housing units (or roughly 4 percent) are in the "vacant due to seasonal or occasional use" category—a figure higher than that of New York or Los Angeles. See sources cited supra note 93. Similarly, in Austin, another relatively low-cost market, 1.7 percent of housing units are in this category, a figure lower than that of New York but higher than that of Los Angeles. See Boeing & Waddell, supra note 96, at 470 (median Austin-area rent is \$1.25 per square foot); sources cite supra note 93 (7309 units out of the city's 417,939 housing units in this category. Similarly, some low-cost markets do have fairly high levels of foreign investment and yet have lower housing costs. See Favilukis & Niuwerburgh, supra note 47, at 7 (noting relatively high levels of foreign investment in Las Vegas and Miami); Boeing & Waddell, supra note 96, at 14 (median Miami-area rent is \$1.33 per square foot, less than half that of New York; Las Vegas median rent is \$0.78 per square foot).

housing costs by increasing demand for housing.¹⁰⁰ The less plausible assumption is that these investors will invade a housing market only if new housing is built—in other words, that these investors are only interested in new high-end urban condos.

The latter assumption seems unlikely to be correct for two reasons. First, major cities that have little high-rise housing nevertheless experience out-of-town housing demand. For example, city regulations limit building heights in most of central Paris to ten floors, and in Paris's most central, historic areas, height limits are even lower.¹⁰¹ Yet out-of-town investment is as common in Paris as in other major cities. Roughly 16.6 percent of Paris buyers are nonresidents, which is more than in New York.¹⁰² Thus, data from Paris suggests that a city will not deter out-of-town buyers by excluding new housing. Similarly, in London, the nonresidents' share of new units does not differ materially from their share of all housing units.¹⁰³ However, it is unclear whether this is true for U.S. cities as well.

Second, it would be economically irrational for wealthy investors to ignore older units. If a housing market becomes expensive, inflation is likely to affect older units as well as newer units—investors can make money buying and selling older housing just as they can make money buying and selling new housing. For example, in the Manhattan zip code 10016, the cheapest for-sale condominium built before 2010 was being offered for \$495,000.¹⁰⁴ By contrast, in some cities, condominiums and even houses sell for far less than that amount.¹⁰⁵ Thus, it appears that the rising tide of real estate prices lifts even older boats.

If, as suggested above, nonresident investors and other second-home buyers are willing to purchase older housing units, this means that if new units are not built many of these investors will bid for older units and will drive up their prices. So even if nonresident investors were likely to purchase all of a city's new housing units, a

103. And in London, nonresidents' share of new units does not differ materially from their share of all housing purchases. *See* discussion *supra* note 67.

^{100.} See Favilukis & Niuwerburgh, *supra* note 47, at 2 (discussing the "demand shock" caused by outof-town investment may increase rents by as much as 18.8 percent if no units rented out to locals; such rent increases disappear if investors rent these housing units to locals).

^{101.} See ALAIN BERTAUD, ORDER WITHOUT DESIGN: HOW MARKETS SHAPE CITIES 311 (2019) ("The highest permissible buildings [] have about 10 floors and are mostly located in the periphery of the municipal area... regulations impose short buildings in the most ancient areas of Paris.").

^{102.} See Favilukis & Niuwerburgh, supra note 47, at 6, 8 (Since 1992, nonlocal buyers have held a consistent share of 16.6 percent of transactions, compared to 10 percent in Manhattan).

^{104.} See ZILLOW, 10016 Condos, https://www.zillow.com/homes/for_sale/Manhattan-New-York-NY-10016/condo_type/61630_rid/1-_beds/pricea_sort/40.753677,-73.964961,40.735535,-

^{73.992427}_rect/14_zm/ [https://perma.cc/YCE6-FT6N] (select "More"; then enter "2016" and "2021" in "year built"). The cheapest unit I found was built in 1965. *See* ZILLOW, *251 E. 32nd Street, #8G*, https://www.zillow.com/homes/for sale/Manhattan-New-York-NY

^{10016/}condo_type/120789860_zpid/61630_rid/1-_beds/0-500000_price/0-

¹⁹⁶⁴_mp/pricea_sort/40.753677,-73.964961,40.735535,-73.992427_rect/14_zm/

[[]https://perma.cc/CHX9-AWV9].

^{105.} For example, in Atlanta, the median house of any type sells for less than \$350,000. See Metro Atlanta Home Group, Metro Atlanta Real Estate Market Statistics, BETTER HOMES & GARDENS, https://www.metroatlantahome.com/about/market-statistics/ [https://perma.cc/NRW7-QEDU] (A median detached house sells for just over \$300,000, and a median attached house sells for just under \$275,000.).

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city that excludes new market-rate units may experience *higher* housing prices than if the new housing was not built.¹⁰⁶

Additionally, if such inflation occurs, exclusionary policies might make foreign investors even more interested in local housing because higher housing prices and more rapid price inflation mean that investors will have higher rates of return.¹⁰⁷ So if cities refuse to allow new housing in order to exclude out-of-town investors, they might create a vicious circle: Exclusionary policies may lead to higher housing prices by making existing housing even more attractive than it would otherwise be to out-of-town investors and creating even higher housing prices due to increased demand for a stagnant housing supply.

4. Are Vacancy Taxes a Less Harmful Alternative?

The discussion above suggests that expensive condos increase housing supply even if many of them are purchased by out-of-town investors, but the law of supply and demand means that housing prices are affected by demand as well as supply. It follows that public concern over foreign investment contains a grain of truth: If there were fewer nonresidents and part-time residents in the housing market, there would be less demand for housing and thus lower housing prices for full-time residents.

If a city taxes nonresident owners, it might be able to discourage part-time occupancy and thus reduce demand. The most widely publicized example of this is Vancouver's vacancy tax, enacted in 2016.¹⁰⁸ This 1 percent tax applies to all property that is unoccupied for more than six months per year.¹⁰⁹ The law defines property as "unoccupied" if it is not the principal residence of an owner or of the owner's tenant.¹¹⁰ Thus, nonresidents are subject to the tax if they purchase a property and do not either (1) use it as a primary residence for most of the year, or (2) rent it out to a tenant.

^{106.} The above discussion assumes, of course, that the city's choice is between market-rate new housing and no new housing at all. The city can also choose to subsidize housing for the lower and/or middle classes, thus allowing it to have new housing with lower rents than market-rate housing. But in that case, the city would incur the financial cost of building the new housing or subsidizing those who do. *Cf.* Joe Cortwright, Editorial, *Why is 'Affordable' Housing So Expensive to Build?*, CENTROID PM (Oct. 20, 2017), https://www.centroidpm.com/why-is-affordable-housing-so-expensive-to-build/ [https://perma.cc/SXX7-H426] (citing examples of subsidized housing costing as much as \$825,000 per unit).

^{107.} Cf. Reuben Duarte, Why Foreign Money is Irrelevant to Increasing Density, PLANETIZEN (July 10, 2014), https://www.planetizen.com/node/70195 [https://perma.cc/3NJG-DAV8].

^{108.} See Nadav Shoked, Cities Taxing New Sins: The Judicial Embrace of Local Excise Taxation, 79 OHIO ST. L.J. 801, 806–09 (2018) (discussing the Vancouver tax and other similar laws).

^{109.} VANCOUVER, B.C., Vacancy Tax By-Law No. 11674, §§ 1.2, 2.3(a), 2.4 (2016) (consolidated Dec. 10, 2020) [hereinafter By-Law] (describing that property is vacant and thus taxable if unoccupied for more than six months during the "vacancy reference period"; "vacancy reference period" is defined as the prior calendar year). In addition, the province of British Columbia passed a similar (but smaller) tax in 2018. *See* V.L. Hendrickson, *How Can I Avoid Paying Vacancy Tax on a Second Home in Vancouver?*, MANSION GLOB. (Mar. 14, 2019), https://www.mansionglobal.com/articles/how-can-i-avoid-paying-vacancy-tax-on-a-second-home-in-vancouver-124063 [https://perma.cc/YRN8-4G75] (explaining the provincial tax passed in fall of 2018, imposing an 0.5% levy).

^{110.} By-Law, supra note 109, at § 2.2.

In 2018, only 922 homeowners paid the tax (down from 1,085 in 2017)¹¹¹ a fact that suggests either that there are very few vacancies or that many households are evading the tax. City data shows that just under 5,000 homeowners have illegally failed to declare their tax status as of February 2019;¹¹² the city plans to bill those households for vacancy taxes unless the taxpayers prove to the city that the property is not vacant.¹¹³ Thus, the tax may apply to as many as 6,000 homeowners—but even that number is only 3.2 percent of the homes potentially subject to the tax.¹¹⁴

Some anecdotal evidence suggests that the vacancy tax appears to have reduced demand, and thus reduced prices, for some of the most expensive condominiums in Vancouver. For example, Vancouver's Trump Tower has 5 percent of its units for sale, which is twice the average for luxury condominiums in Vancouver.¹¹⁵ As a result, one condo that was originally listed at almost \$3.4 million recently sold for \$2.95 million.¹¹⁶

It is not yet clear whether these trends have affected rents. Data from Canada's national housing agency, the Canada Mortgage and Housing Corporation,¹¹⁷ suggests that the median rent in Vancouver increased from \$1,150 in 2016, to \$1,300 in October 2018, an increase roughly comparable to that of the preceding two years (when rent increased from \$1,035 to \$1,150).¹¹⁸ On the other hand, Vancouver home prices declined by 8 percent between September 2018 and September 2019.¹¹⁹ Thus, it may be that pre-2019 data is simply outdated.¹²⁰

114. Id. (noting that over 189,000 properties were required to declare vacancy status in the 2018 tax year).

[https://perma.cc/GZV5-N3LT] ("Real estate sources say two to three per cent of properties are typically for sale in condo buildings. Trump Tower has 290 units, which means there would normally be six to nine units for sale, not 15.").

116. Id.

117. See generally Julia Kagan, Canada Mortgage and Housing Corporation (CMHC), INVESTOPEDIA (Mar. 9, 2020), https://www.investopedia.com/terms/c/cmhc.asp [https://perma.cc/RC5X-WKCC] (describing the role and functions of the CMHC).

120. A variety of private websites have data on Vancouver rents. However, these surveys show no consensus as to whether rents are rising or falling. *Compare* Ben Myers, *Rentals.ca December 2019 National Rent Report*, RENTALS.CA (Feb. 12, 2020), https://rentals.ca/blog/rentals-ca-december-2019-national-rent-report [https://perma.cc/EM7G-4N7R] (showing Vancouver rents having increased by 10

^{111.} CITY OF VANCOUVER FIN., RISK AND SUPPLY CHAIN MGMT., ADMINISTRATIVE REPORT ON IMPROVING THE EFFECTIVENESS OF THE EMPTY HOMES TAX 5 (Feb. 8, 2019).

^{112.} Id. at 4.

^{113.} *Id.* ("These properties have been issued a tax bill pursuant to the provisions of the Vacancy Tax By-law and have received a ticket for a \$250 penalty (imposed under the By-law Notice Enforcement By-law) for failing to declare by the deadline. At this time, the City is allowing owners to make a late declaration following payment of the penalty. If an owner makes a late declaration for a status other than vacant, the bill will be cancelled.").

^{115.} See John Mackie, Vacancy Taxes Prompt Sale of Luxury Condos in Downtown Vancouver, THE PROVINCE (Aug. 23, 2019), https://theprovince.com/business/real-estate/vacancy-taxes-prompt-sale-of-luxury-condos-in-downtown-vancouver/wcm/e5bc57d7-bf6a-4619-80a8-ac3e2f62baab

^{118.} Housing Market Information Portal, *Vancouver–Historical Rental Market Statistics Summary*, CAN. MORTG. & HOUS. CORP. (Oct. 2020), https://www03.cmhc-schl.gc.ca/hmip-pimh/en/TableMapChart/Table?TableId=2.1.31.3&GeographyId=2410&GeographyTypeId=3&Display As=Table&GeographyName=Vancouver#October [https://perma.cc/G5UR-SBQ8].

^{119.} See MLSO Home Price Index, National Statistics, CANADIAN REAL EST. ASS'N (Jan. 15, 2021), https://creastats.crea.ca/en-CA/ [https://perma.cc/P9HR-2R2U].

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In sum, it seems possible that Vancouver's vacancy tax has reduced housing demand and thus affected housing costs, but it is too soon to know how useful it has been because this policy has been in effect for only a few years.¹²¹

5. Supply Skepticism: Confronting Counter-Arguments

The discussion above assumes that ordinarily, new market-rate housing will hold down rents by increasing housing supply. However, some commentators argue that this is not the case even in the absence of out-of-town investment because (1) most cities have a limited supply of land and thus cannot increase new housing supply; (2) new supply in the luxury market does not affect the rest of the housing supply; and (3) new housing generally induces new demand and thus fails to reduce housing costs. Each of these arguments will be addressed below.

a. Does Limited Land Supply Hinder Housing Supply?

Some commentators argue that new housing will not reduce housing costs because "the supply of land is limited in many jurisdictions by existing development and by geographical constraints such as coasts or mountains."¹²² Accordingly, market-rate housing allegedly crowds out land that could be used for low-income housing and makes housing more expensive.¹²³

This argument lacks merit for two reasons. First, it is not the case that land used for market-rate housing will, in the absence of construction, be used for low-income housing. That land may be used instead for non-housing purposes because the government may not be able to subsidize low-income housing on every available piece of land, given the variety of other social needs competing for government funding.¹²⁴ Second, the relationship between land scarcity and housing scarcity is a weak one because cities can always reduce housing costs by allowing land to be built more intensively. For example, suppose that a tract of land is worth \$300,000. The city could allow one single-family house to be built, causing one family to pay \$300,000 (plus construction costs) for the land, or the city could allow a duplex to be built, causing each household to pay \$150,000 (plus half of construction costs). The city could also allow a four-unit condominium to be built, causing each household to pay only \$75,000 (plus one-fourth of construction costs). Finally, if the city allowed a 200-unit condominium complex to be built, each household's share of

percent over the past year), *with Rent Trend Data in Vancouver, British Columbia*, RENT JUNGLE, https://www.rentjungle.com/average-rent-in-vancouver-bc-rent-trends/ [https://perma.cc/4NW2-R56J] (claiming that Vancouver rents declined significantly from March 2018 to March 2019).

^{121.} But cf. Shane Phillips, Does the Los Angeles Region Have Too Many Vacant Homes? 13 (UCLA Lewis Center, Working Paper Series, Feb. 2020), https://escholarship.org/uc/item/87r4543q [https://perma.cc/F5P9-LAM3] (arguing that even if a vacancy tax does not affect housing supply, it might be socially useful because revenue could be used to build affordable housing).

^{122.} Vicki Been, Ingrid Gould Ellen & Katherine O'Regan, *Supply Skepticism: Housing Supply and Affordability*, 29 HOUS. POL'Y DEBATE 25, 27 (2019) (describing argument) (citation omitted).

^{123.} Id.

^{124.} *Id.* ("[T]he reasons affordable housing is not provided in larger quantities go far beyond the lack of land and include the inadequacy of funding to pay for construction, financing costs, and operating costs.").

land costs would be only \$1,500—which is to say, next to nothing.¹²⁵ Thus, if a city allows unlimited housing construction, housing can be inexpensive even if land is expensive.

b. Does the Luxury Market Affect the Nonluxury Housing Supply?

It could also be argued that even if new high-end housing affects housing costs for other high-end housing, it might not reduce housing costs for low- and moderate-income households¹²⁶ because housing for the rich is an entirely separate market.¹²⁷ But, as a matter of common sense, it seems likely that what happens at the high end of a housing market can affect the rest of the market. To understand why, imagine a housing market with 5,000 apartments—1,000 for the rich, 1,000 for the upper middle class, 1,000 for the lower middle class, and 2,000 for the working class and the poor.

Then imagine that 1,000 new apartments for the rich are built. The rich people move into the new apartments, leaving the older upper-class apartments for the upper middle class. As the upper-middle-class units become deserted by their original tenants, these units filter down to the lower middle class—after which there are 3,000 apartments (the 1,000 lower-middle-class apartments plus the 2,000 working-class and poor apartments) competing for only 2,000 working-class tenants.

^{125.} Cf. Nolan Gray, Density Is How the Working Poor Outbid the Rich for Urban Land, MKT. URBANISM (Feb. 5, 2018), http://marketurbanism.com/2018/02/05/density-working-poor-outbid-richurban-land/ [https://perma.cc/BG9E-9UK2] (explaining other scenarios in which higher density urban property uses might lead to other socially beneficial outcomes). It could be argued that the added construction costs of large apartment buildings make apartments more expensive than single-family homes. But if this was true, condo prices would typically be higher than house prices in the same area. This is generally not the case-especially in dense cities like Manhattan with lots of condos, as opposed to smaller cities where most land is zoned for single-family housing. See E.B. Solomon, Is NYC's Undervalued?, THE REAL DEAL Townhouse Market (Sept. 1. 2014). https://therealdeal.com/issues_articles/is-nycs-townhouse-market-undervalued/ [https://perma.cc/JY7S-HDUB] (reporting that in Manhattan, average townhouse cost over \$3.5 million, while average condo cost \$1.25 million.); Steve Gillman, Condo vs. House: Before You Buy, You Must Read This, THE PENNY HOARDER (Jan. 31. 2017), https://www.thepennyhoarder.com/life/condo-vs-house/ [https://perma.cc/2D8J-KBXZ] (noting that "houses cost more than condos just about everywhere"). Admittedly, in some metro areas, condos are almost as costly as houses. However, this fact may reflect not the inherent costliness of condos, but the fact that local governments restrict multifamily housing to a much greater extent than single-family housing, thus creating an artificial shortage of condos that leads to artificially high prices. See JOINT CTR. FOR HOUS. STUD. AT HARV. UNIV., AMERICA'S RENTAL HOUSING: EXPANDING OPTIONS FOR DIVERSE AND GROWING DEMAND 17 (Harvard, 2015) ("Local land use regulations often restrict the area available for multifamily development, particularly in suburbs, which can increase the competition for available sites and raise land costs. . . . [Such] restrictions often limit the number of units in multifamily developments. This raises per-unit construction costs and ultimately the rents that developers must charge to be profitable."); Michael Lewyn, Yes to Infill, No to Nuisance, 42 FORDHAM URB. L.J. 841, 854 (2015) (noting that in most cities, the majority of residential land is zoned for single-family housing).

^{126.} See, e.g., Ana Aguirre, Bishop David Benke, Muchelle Neugebauer & Robert Santiago, *CityViews: For East New York's Housing Crunch, Supply is Not the Solution*, CITY LIMITS (Feb. 18, 2016), https://citylimits.org/2016/02/18/cityviewsfor-east-new-yorks-housing-crunch-supply-is-not-thesolution/ [https://perma.cc/C97M-WK2X] ("The only increase in housing supply that will help to alleviate New York's affordable housing crisis is housing that is truly affordable to low-income and working-class people.") (emphasis in original).

^{127.} See Been, Ellen & O'Regan, supra note 122, at 28.

In such a scenario, it seems likely that landlords will reduce their rents to attract the working-class tenants, and that 1,000 of the units will be left vacant. If these apartments deteriorate over time, this "filtering down" of housing towards the lower classes will accelerate as the apartments become less desirable.¹²⁸

On the other hand, assume that 1,000 rich households move to a city and outbid the existing rich people for their apartments. If no new high-end housing is built, the native rich will then move to the upper-middle-class units (because they can still outbid the existing upper-middle-class tenants), the upper-middle-class tenants then would outbid the lower-middle-class tenants for the lower-middle-class units, and the lower-middle-class tenants would outbid the poor for 1,000 of the 2,000 working-class units. Rents would rise as landlords essentially auction off the low-end units, and the 1,000 poorest households might be left homeless or might need to accept smaller living spaces to avoid becoming homeless. In this hypothetical, apartments originally used by poorer tenants "filter up" to wealthier tenants due to housing scarcity.¹²⁹

Several studies show that housing does filter down to less wealthy tenants in the United States. A Hudson Institute economic study found that millions of housing units have either "filtered down" or "filtered up" in recent decades. Between 1985 and 2013, 4.6 million units¹³⁰ filtered down to the nationwide inventory of rental housing affordable to households earning 50 percent of area median income.¹³¹ But in high-cost cities like Los Angeles and New York, the number of housing units that "filtered up" (that is, gentrified and thus became less affordable) exceeded the number that filtered down and became more affordable.¹³² In New York, three times as many housing units "filtered up" as "filtered down."¹³³ Thus, policies that increase housing prices cause gentrification and reduce filtering down.

Similarly, the Joint Center for Housing Studies at Harvard University found that "downward filtering of higher-cost housing had increased the number of units renting for less than \$400 by 11 percent from the level in 2003."¹³⁴ However, this number was offset by the number of low-cost units that were removed from the stock by deterioration and demolition.¹³⁵

^{128.} See C. Tsuriel Somerville & Christopher J. Mayer, *Government Regulation and Changes in the Affordable Housing Stock*, 9 FRBNY ECON. POL'Y REV. 45, 46 (2003) ("Without expenditures on maintenance, renovation, and repairs, units decline in quality as they depreciate physically and technologically. As this occurs, the units move down the quality ladder.").

^{129.} Id. at 46, 50 (using term). See also Evan Mast, The Effect of New Market-Rate Construction on the Low-Income Housing Market 4 (Upjohn Institute Working Paper No. 19-307, 2019) https://research.upjohn.org/cgi/viewcontent.cgi?article=1325&context=up_workingpapers

[[]https://perma.cc/7496-T2ED] (describing relevant economic literature on "filtering").

^{130.} JOHN C. WEICHER, FREDERICK J. EGGERS & FOUAD MOUMEN, THE LONG-TERM DYNAMICS OF AFFORDABLE RENTAL HOUSING 2–3 (Hudson Inst., 2017),

^{131.} *Id.* at 7 (defining housing units as affordable "if the sum of rent, utilities, and related costs, adjusted for the number of bedrooms, is less than or equal to 30 percent of 50 percent of local area median income").

^{132.} See id. at 152.

^{133.} Id.

^{134.} JOINT CTR. FOR HOUS. STUD. AT HARV. UNIV., supra note 125, at 16.

^{135.} Id. at 3.

Some commentators argue that filtering down is rare because housing markets are segmented—that is, an increase in high-cost housing will lead to immediate price drops for high-end housing but will affect lower-cost housing more gradually or not at all.¹³⁶ For example, if 100 new high-end units are created, some of these units will be purchased by persons abandoning older housing, but others might be used as second homes by owners of existing high-end units.¹³⁷ However, a study by economist Evan Mast seems to partially disprove this argument. Mast surveyed 686 new multifamily buildings in twelve cities and tracked 52,000 of their current residents.¹³⁸ He found that new market-rate housing creates a chain of moves similar to the "filtering down" described above, and that this movement reduces demand for lower-income housing. In particular, Mast found that building 100 new market-rate units creates a chain of moves that leads 70 people to move out of lower-income neighborhoods.¹³⁹

Even if the "segmented markets" argument is partially true, it certainly does not justify a claim that what happens in high-end markets has no effect on other housing submarkets. If affluent neighborhoods were a *wholly* separate market from middle- and lower-class neighborhoods, no neighborhoods would ever gentrify which is obviously not the case.¹⁴⁰

It appears that filtering occurs in two directions. Where housing is scarce, it tends to filter up, as middle-and upper-class households who are priced out of a building or neighborhood move to slightly less elegant buildings and neighborhoods.¹⁴¹ But when housing supply is abundant, housing tends to filter down, as middle- and upper-class households abandon older housing for newer housing. Thus, it logically follows that construction of new housing, other things being equal, reduces demand for older housing and causes it to filter down to less affluent renters.

^{136.} See, e.g., Rick Jacobus, *Why Voters Haven't Been Buying the Case for Building*, SHELTERFORCE (Feb. 19, 2019), https://shelterforce.org/2019/02/19/why-voters-havent-been-buying-the-case-for-building/ [https://perma.cc/7AJT-BX8].

^{137.} *Id.* ("As prices fall, households in the luxury segment of the market may consume more housing. This can happen when someone buys a second home or even when two roommates respond to lower prices by each renting their own place. But also, some luxury units may be taken off the market when prices fall....").

^{138.} Mast, supra note 129, at 2.

^{139.} Id. at 1-2 (such construction "sparks a chain of moves that eventually leads 70 people to move out of neighborhoods from the bottom half of the income distribution, and 39 people to move out of neighborhoods from the bottom fifth.").

^{140.} Cf. NATIONAL COMMUNITY REINVESTMENT COALITION, Shifting Neighborhoods: Gentrification and Cultural Displacement in American Cities (March 19, 2019), https://ncrc.org/gentrification/[https://perma.cc/29B3-8GRK] (discussing extent of gentrification in American cities).

^{141.} See supra note 129 and accompanying text; Somerville &Mayer, supra note 128, at 51 ("[G]reater regulation results in an increase in the probability that an affordable rental unit will filter up to become unaffordable" because the possibility of higher rents means that renovation of older apartments will become more profitable for landlords.); Rosenthal, supra note 136, at 28 (filtering down is less common in most expensive parts of United States).

c. Does New Housing Induce Demand?

It has been argued that, even in the absence of out-of-town investment, new housing can never reduce housing prices because, even if housing creates a short-term decline in a city's housing prices, that decline will spur new demand for housing as households move to the city.¹⁴² But this argument is based on the assumption that there are no constraints limiting households' ability to move to cheaper cities—an assumption that leads to absurd results.¹⁴³ If this assumption were true, cheap cities would quickly become more expensive as households in search of cheaper housing moved to those cities. Eventually, rising demand would cause those cities' prices to increase until they became as expensive as other cities. Obviously, this assumption is incorrect: housing prices vary widely from one city or region to another.¹⁴⁴

Moreover, the "induced demand" theory rests on the assumption that migration is a major cause of new housing prices. But if this was the case, the cities with the fastest population growth would have the highest housing costs. In fact, regions with the fastest population growth tend not to be the most expensive cities. Between 2000 and 2014, the regions with the highest levels of population growth were Raleigh, Austin, Las Vegas, McAllen, and Orlando.¹⁴⁵ The most expensive of these regions, Austin, had a median housing price of \$303,000 in late 2018—far below the median prices in expensive regions such as San Francisco (\$1.3 million) and Los Angeles (\$620,000).¹⁴⁶

^{142.} See Been et al., supra note 122, at 29–30; Gelinas, supra note 49. A related argument is that new supply might spur demand for a given neighborhood, thus spurring gentrification and displacement. See Been, et.al., supra note 122, at 30–31. But the high-end properties discussed in this Article are likely to be in already expensive neighborhoods, not in newly gentrifying areas. For example, New York City's "Billionaire's Row" includes zip codes 10019 and 10020, two zip codes that were affluent decades ago. See Lauren Paley, Billionaire's Row: Where is It and How'd It Get That Name?, ONE BLOCK OVER (May 9, 2018) https://streeteasy.com/blog/billionaires-row-nyc/_[https://perma.cc/VLX7-BRP2] (describing area as near Central Park South, stretching from Columbus Circle to Park Avenue); Manhattan Zip Code Map, MAPS MANHATTAN, http://maps-manhattan.com/manhattan-zip-code-map[https://perma.cc/8VK2-8J4Y] (these blocks part of zip codes 10019 and 10022); UNITED STATES CENSUS BUREAU, American Factfinder, http://factfinder.census.gov [https://perma.cc/F27Z-GLSG] (In 2000, both zip codes had median household income over \$55,000 at a time when Manhattan's median income was \$38,293.). Thus, gentrification is beyond the scope of this Article. But cf. Michael Lewyn, Does the Threat of Gentrification Justify Restrictive Zoning?, 46 REAL EST. L.J. 447, 455–61 (2017) (questioning alleged link between new housing and displacement).

^{143.} Been et al., *supra* note 122, at 30 (Arguing that induced demand theory "requires demand curves to be perfectly elastic—or, in other words, it assumes that neighborhoods and jurisdictions are perfect substitutes and that there are no constraints on the ability and willingness of households to move. . . . Any additional demand induced by new housing is limited by personal and economic constraints on the ability and willingness of households to move, restrictions on immigration, and uncertainty and other factors that might inhibit renters and buyers from renting or buying in the market in which housing supply increases.").

^{144.} See MICHAEL LEWYN, GOVERNMENT INTERVENTION AND SUBURBAN SPRAWL: THE CASE FOR MARKET URBANISM 79 (2017)) (showing wide variation between metro areas' housing prices; for example, median home price in metropolitan San Francisco over \$1 million, while median price in metropolitan Orlando under \$200,000).

^{145.} Id. (citation omitted).

^{146.} See NATIONAL ASSOCIATION OF HOME BUILDERS, The NAHB/Wells Fargo Housing Opportunity Index: Complete History by Metropolitan Area (1991-Current), https://www.nahb.org/en/ research/housing-economics/housing-indexes/housing-opportunity-index.aspx [https://perma.cc/REP4-3VYN].

And over the last decade, home prices have grown less rapidly in highgrowth regions than in some high-cost regions. For example, in metropolitan San Francisco, home prices rose from \$680,000 to \$1.3 million between 2008 and 2018 almost a 100 percent increase—and in metropolitan San Jose, prices similarly rose from \$544,000 to \$1.07 million—almost a 100 percent increase.¹⁴⁷ By contrast, home prices rose by 59 percent in Austin (from \$191,000 to \$303,000), by 42 percent in Raleigh (from \$210,000 to \$300,000), and by under 40 percent in the other three high-growth regions.¹⁴⁸ These facts suggest that population growth has less effect on housing costs than does constraints on housing supply, such as zoning.¹⁴⁹

B. Does New Housing Raise Land Costs?

The IPS report claims that new housing increases housing costs by driving up the cost of downtown land.¹⁵⁰ At first glance, this argument might seem persuasive. If a city government allows housing on one parcel of land, there will be more demand for the land and land prices will increase.¹⁵¹ It could therefore be argued that "upzoning" (that is, permissive zoning that allows for new housing)¹⁵² will lead to higher housing prices.

But this argument overlooks the likelihood that higher land prices will not lead to higher rents *if* landowners are allowed to build more units per piece of land. A landowner who builds 100 apartments on a tract of land can charge cheaper rents than one who builds 10 apartments on the same tract of land, assuming that other landowner costs are equal.¹⁵³ So even if upzoning increases land prices, it is unlikely to increase rents.

Second, if upzoning increased housing prices, "downzoning" (and restrictive zoning generally) should prevent housing prices from rising. The city of Los Angeles has tested this theory. In 1960, that city was zoned to support 10 million people—that is, if every landowner built to the extent allowed by zoning, the city

^{147.} *Id.* I note that price appreciation was not this rapid in all high-cost regions. In Los Angeles, home prices rose by only 52 percent (from \$407,000 to \$620,000). *Id.* This is a lower rate of increase than that in Austin, but a higher rate than in other high-growth cities. *See infra* note 153 and accompanying text (describing changes in high-growth cities).

^{148.} Id. (showing that median price increased from \$101,000 to \$139,000 in McAllen, \$225,000 to \$240,000 in Orlando, and from \$245,000 to \$283,000 in Las Vegas).

^{149.} Cf. Robert Ellickson, Zoning and the Cost of Housing: Evidence from Silicon Valley, Greater New Haven, and Greater Austin, 32–48, 77–83, https://papers.srn.com/sol3/ papers.cfm?abstract_id=3472145 [https://perma.cc/GKH3-76WL] (Showing that zoning in Austin and its suburbs is less restrictive than in Northern California); Lewyn, *supra* note 146, at 74–75 (describing unusually restrictive zoning in San Francisco).

^{150.} See Collins & de Goede, supra note 42, at 3 ("The luxury building boom is driving up the cost of land in central neighborhoods....").

^{151.} See Richard Florida, Does Upzoning Boost Housing Supply and Lower Prices? Maybe Not, BLOOMBERG CITYLAB (Jan. 31, 2019, 9:05 AM), https://www.citylab.com/life/2019/01/zoning-reform-house-costs-urban-development-gentrification/581677/ [https://perma.cc/6MP4-C8W5] (citing study showing increased land values from Chicago upzoning).

^{152.} See Bradley Pough, Neighborhood Upzoning and Racial Displacement: A Potential Target for Disparate Impact Litigation?, 21 U. PA. J. L. & SOC. CHANGE 267, 276 (2018).

^{153.} See supra note 125 and accompanying text.

would have had 10 million residents.¹⁵⁴ By contrast, today the city is zoned to support 4.3 million, only slightly more than its current population.¹⁵⁵ If downzoning reduced housing costs, Los Angeles land prices would have declined or stabilized, and rents would have fallen. And yet land values there have increased sixfold in recent decades,¹⁵⁶ and rents have risen by 55 percent (adjusted for inflation), which is more than four times the increase in median renter income in Los Angeles.¹⁵⁷

New York City has downzoned so aggressively that 40 percent of Manhattan's buildings could not be built under the current zoning code.¹⁵⁸ Similarly, San Francisco's 1978 downzoning decreased the number of housing units that could be built by 180,000 (roughly one-third of the city's housing supply).¹⁵⁹ And yet in both markets, rents have exploded¹⁶⁰ and land values have increased at least sevenfold over the past thirty-five years¹⁶¹—far more rapidly than inflation.¹⁶²

Admittedly, upzoning does not always immediately increase housing supply. Yonah Freemark examined the results of some upzonings in Chicago between 2013 and 2015 and found an increase in land values in the upzoned areas, but no increase in new housing permits.¹⁶³ Some commentators interpreted this study as a broad finding that more permissive zoning does not reduce housing prices.¹⁶⁴ However, Freemark himself rejects this conclusion and instead points out that "development is a lengthy process; it takes time to move from a policy like zoning to actually getting housing units on the ground."¹⁶⁵ A Chicago landowner who wishes to build new housing must find a site for the housing, design and finance the housing,

157. See Andrew Woo, How Have Rents Changed Since 1960?, APARTMENT LIST (June 14, 2016), https://www.apartmentlist.com/rentonomics/rent-growth-since-1960 [https://perma.cc/FBY9-PGGX].

158. See Quoctrung Bai, Matt A.V. Chaban, & Jeremy White, 40 Percent of the Buildings in Manhattan Could Not Be Built Today, N.Y. TIMES (May 20, 2016), https://www.nytimes.com/interactive/2016/05/19/upshot/forty-percent-of-manhattans-buildings-could-not-be-built-today.html [https://perma.cc/8XK8-E86P].

159. See Hunter Oatsman-Stanford, *The Bad Design That Created One of America's Worst Housing Crises*, FAST CO. (Sept. 28, 2018), https://www.fastcompany.com/90242388/the-bad-design-that-created-one-of-americas-worst-housing-crises [https://perma.cc/5KAG-WFCZ].

^{154.} See Gregory D. Morrow, The Homeowner Revolution: Democracy, Land Use and the Los Angeles Slow-Growth Movement, 1965-92, UCLA ESCHOLARSHIP at 3 (2013), http://escholarship.org/uc/item/6k64g20f#page-1 [https://perma.cc/3ZU3-84HH].

^{155.} Id. at 3, 19 n.2.

^{156.} See AEI HOUSING CENTER, Land and House Values, https://www.aei.org/wp-content/uploads/2018/10/msa_graph_value_2018q2.pdf [https://perma.cc/5WZQ-VENX].

^{160.} See supra notes 35–36 and accompanying text.

^{161.} See AEI HOUSING CENTER, *supra* note 158 (showing that between 1985 and the present, land prices rose at levels roughly comparable to housing prices—tenfold in New York and sevenfold in San Francisco).

^{162.} See Consumer Price Index Data from 1913 to 2021, U.S. INFLATION CALCULATOR, https://www.usinflationcalculator.com/inflation/consumer-price-index-and-annual-percent-changes-from-1913-to-2008/ [https://perma.cc/N3KV-LVK5] (showing that consumer prices generally have risen by 2.5 times since 1984).

^{163.} Yonah Freemark, Upzoning Chicago: Impacts of a Zoning Reform on Property Values and Housing Construction, URB. AFFS. REV. (Mar. 29, 2019), https://urbanaffairsreview.com/2019/03/29/upzoning-chicago-impacts-of-a-zoning-reform-on-property-values-and-housing-construction/comment-page-1/ [https://perma.cc/SKW6-HMY5].

^{164.} See Florida, supra note 153.

^{165.} See Freemark, supra note 165.

and navigate legal obstacles.¹⁶⁶ For example, Chicago's zoning system gives council members veto power over new development.¹⁶⁷ Because of these obstacles, Chicago's upzoning may take years to increase housing supply.

In fact, a 2014 study suggests that reducing regulations may *reduce* land costs. This study utilized data from 110 cities in metropolitan San Francisco to analyze the relationship between land use regulations and land prices.¹⁶⁸ The study measured the amount of regulatory burden based on the number of independent reviews required for a building permit; for example, a city that requires a review by a city council, an architectural review board, and a planning commission is more burdensome than one that merely requires a city council vote.¹⁶⁹ The authors found that "the stringency of regulations is positively related to the price of vacant land, even when controlling for locational, geographic and demographic characteristics of the land use."¹⁷⁰ In other words, a city that excludes housing through strict zoning may actually cause land costs to increase.

IV. EXTERNALITIES UNRELATED TO HOUSING COSTS

Opponents of new high-end condos argue that in addition to raising land and housing costs, these buildings lead to increased inequality, degraded street life, money laundering, and environmental degradation. Each of these issues will be addressed in turn.

A. Inequality

The IPS report claims that because high-end condos will attract the rich, expensive new housing will "exacerbate [cities'] already grotesque inequality of income, wealth and opportunity."¹⁷¹ According to this argument, some central cities are already more unequal than their suburbs,¹⁷² and if a city attracts new rich people, this alleged problem will get worse.

First, it is important to note that this argument contradicts the claim that these condos will become unoccupied "ghost apartments."¹⁷³ If rich investors buy apartments in city X but never actually live there, then they will not affect inequality within the city. But, more importantly, inequality-based attacks on housing development are based on the assumption that if new housing is not built in a city, rich people will not come there. As noted above, out-of-town investors purchase

^{166.} See Alex Baca & Hannah Lebovits, No, Zoning Reform Isn't Magic. But It's Crucial, BLOOMBERG CITYLAB (Feb. 5, 2019), https://www.citylab.com/perspective/2019/02/zoning-reform-house-costs-yonah-freemark-research/582034/ [https://perma.cc/4A9A-9VN4].

^{167.} *Id.* (explaining that upzoning "added a bonus to particular underlying zones, but the local alderman can change those zones to avoid the bonus" (citation omitted)).

^{168.} See Nils Kok, Paavo Monkkonen & John M. Quigley, Land Use Regulations and the Value of Land and Housing: An Intra-metropolitan Analysis, 81 J. URB. ECON. 136, 137 (2014).

^{169.} Id. at 144.

^{170.} *Id.* The authors noted that an earlier study of Florida cities had yielded contrary results. *Id.* at 145. The authors suggested that in California there is a "lack of close substitutes between jurisdictions," *id.*, while in Florida, "cities are close substitutes for one another," *id.* at 138.

^{171.} Collins & de Goede, supra note 42, at 3.

^{172.} Id. at 8 (citing Boston as an example).

^{173.} See supra note 74 and accompanying text.

older housing as well as newer housing. For example, although Paris limits new building in its historic core, it has as many out-of-town buyers as other major cities.¹⁷⁴ Thus, it seems that if a city excludes new housing, it will not necessarily exclude wealthy investors.

Finally, it is not necessarily the case that cities are better off without rich households. Wealthy residents increase a city's tax base, which means that more services are available for everyone.¹⁷⁵ And wealthy people who live and shop in a city create demand for goods and services, thus creating jobs for local residents of all social classes.¹⁷⁶

A related argument is that if wealthy people reside in a city, they will have less of a stake in public services than middle-class and poor residents and thus will "use their considerable clout to reduce taxes and expenditures on public services."¹⁷⁷ But cities with expensive real estate actually tend to have *more* generous public services than other cities.

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TABLE 1: The Superrich, Taxes and Spending

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No. of houses listed at over \$5 million (per 1 million residents) ^{178}		Central city per capita budget ¹⁷⁹
New York	184	8,690
Los Angeles	114	2,132
Boston	84	4,180
San Francisco	83	9,433
San Diego	66	2,256
Washington, DC	45	15,624
Atlanta	39	1,190
Austin	31	3,953
Dallas	30	2,333
Houston	28	2,476
Seattle	24	6,744
Chicago	15	2,704
Denver	10	2,294
Phoenix	7	2,333

174. See supra text accompanying notes 102-03.

175. In fact, the IPS report implicitly admits this is the case by calling for additional taxes upon highend real estate and suggesting that the revenue from those taxes should be used to subsidize housing. *See* Collins & de Goede, *supra* note 42, at 4.

176. Again, the IPS report implicitly admits this by noting that wealthy families who live in Boston might "privatize their needs—in the form of private schools, private club and recreational facilities, and other services." *Id.* at 19. Obviously, all of these services employ local residents.

^{177.} Id.

^{178.} To find the number of high-end residences, I searched at Zillow.com (on April 11, 2019) for each city. To calculate the number of million-dollar residences per million residents I used municipal population data at JANSSEN, *supra* note 9, at 614.

^{179.} See BALLOTPEDIA, Analysis of Spending in America's Largest Cities, https://ballotpedia.org/Analysis_of_spending_in_America%27s_largest_cities [https://perma.cc/3FM7-Q33J].

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Philadelphia	7	2,903
Minneapolis	4	2,999
San Antonio	3	1,714
San Jose	1	3,004
Detroit	0	3,775

Table 1 shows that cities in regions with more high-end real estate actually spend as much or more on public services than less expensive cities. Five of the cities listed above have over fifty \$5-million properties per 1 million people. Three of the five (New York, Boston, and San Francisco) spend more than \$4,000 per resident. By contrast, among the six cities with fewer than ten such properties per 1 million people (Phoenix, Philadelphia, Minneapolis, San Antonio, San Jose, and Detroit), not one spends that much. In other words, cities with expensive housing tend to spend more on public services than cities with no high-cost real estate.

B. Impaired Street Life

One common argument against high-rise housing (especially housing for the rich, which tends to have more amenities than other housing)¹⁸⁰ is that high-rise housing reduces street life and thus makes cities more dull.¹⁸¹ Some commentators claim that residents of the most expensive high-rises are unlikely to go out into the streets because if the high-rise "include[s] a restaurant, market, gym and other amenities [residents] never have to go outside."¹⁸²

How can one prove or disprove such a sweeping claim? Walkscore.com rates neighborhoods based on the number of restaurants, grocery stores, and other amenities within walking distance. If expensive high-rises were bad for street life, their neighborhoods would have mediocre Walkscores because if their residents did not walk outside to shop, the nearby shops would not have enough customers to survive. But one of the most expensive high-rises in New York City, 432 Park Avenue (where most units sell for over \$10 million)¹⁸³ has a Walkscore of 96 out of a possible 100.¹⁸⁴ There are four restaurants, four coffee shops, and fifteen grocery stores within half a mile of 432 Park.¹⁸⁵ 432 Park, of course, may be aberrant because of the high walkability of New York City generally.¹⁸⁶ But the most expensive high-

^{180.} Cf. Collins & de Goede, supra note 42, at 32 (describing a luxury community with "wild amenities").

^{181.} Taz Khatri, 7 Reasons Why High-Rises Kill Livability, SMARTCITIESDIVE (Sept. 25, 2014), https://www.smartcitiesdive.com/ex/sustainablecitiescollective/7-reasons-why-high-rises-kill-

livability/561536/ [https://perma.cc/T6LQ-KQRY] (quoting claim by urban planner that high-rises create a "city that is detached from street life"). I note that most of the "7 Reasons" are reiterations of the suggestion that high-rise residents are shut-ins. For example, its seventh reason is that high-rises are bad for health because "high-rises keep children and the elderly from getting the exercise the extra effort [sic] it takes to get outside encourages them to stay at home and flip on the TV." *Id*.

^{182.} Id.

^{183.} See supra note 39, and accompanying text.

^{184.} See WALKSCORE, 432 Park Avenue, https://www.walkscore.com/score/432-park-ave-new-york-ny-10022 [https://perma.cc/P2XT-LYEQ].

^{185.} Id.

^{186.} See WALKSCORE, Living in New York, https://www.walkscore.com/NY/New_York [https://perma.cc/RG58-PT27] (providing that the city as a whole has a Walkscore of 88).

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rises in Boston also have high Walkscores. Boston's Mandarin Oriental, which the IPS report characterizes as a "wealth storage unit,"¹⁸⁷ has a Walkscore of 100.¹⁸⁸ Millennium Tower, the largest Boston high-rise profiled in the IPS report,¹⁸⁹ has a Walkscore of 98.¹⁹⁰ If any high-rise could reduce street life, it would be a behemoth such as the 443-unit Millennium Tower¹⁹¹—yet there are eight restaurants and four coffee shops within half a mile of that building.¹⁹² Thus, it appears that high-rise housing and shopping can easily coexist.

C. Money Laundering

The IPS report notes that some of Boston's most expensive high-rise condominiums are being purchased through Limited Liability Companies (LLCs),¹⁹³ and the report suggests that LLC purchases are especially likely to involve money laundering.¹⁹⁴ An LLC is a legal entity that is similar to both a corporation and a partnership: its members have "limited liability as if they were shareholders of a corporation [but are]... a partnership for tax purposes."¹⁹⁵ LLC purchasers are anonymous: if real estate is purchased through an LLC, the name of the LLC is public but the LLC members' names are not.¹⁹⁶ This feature makes LLCs popular for persons who may not want to make their address or their wealth publicly known—for example, a celebrity who fears "the whole world potentially camping out on [his or her] front step"¹⁹⁷ or a foreign family who fears that public disclosure of their wealth may make them a target for kidnapping.¹⁹⁸

Unfortunately, the anonymity of LLCs also facilitates money laundering that is, the concealment of income in order to facilitate tax evasion or avoid

^{187.} See Collins & de Goede, supra note 42, at 10.

^{188.} See MANDARIN ORIENTAL BOSTON, https://www.mandarinoriental.com/boston/backbay/luxury-hotel [https://perma.cc/6P78-3TRU] (address is 776 Boylston); WALKSCORE, 776 Boylston, https://www.walkscore.com/score/776-boylston-st-boston-ma-02199 [https://perma.cc/S8DD-A8AG] (providing a Walkscore of 100 for this address).

^{189.} See Collins & de Goede, supra note 42, at 10 (This building has 443 units, more than any other building listed.).

^{190.} SeeMILLENNIUMTOWERBOSTONLOCATION,http://www.millenniumtowersboston.com/#location[https://perma.cc/9V7E-SJAV](location is 1Franklin Street);WALKSCORE, 1 Franklin Street, https://www.walkscore.com/score/1-franklin-st-boston-ma-02108[https://perma.cc/3MVZ-3226].

^{191.} See supra note 191.

^{192.} See WALKSCORE, supra note 192.

^{193.} See Collins & de Goede, supra note 42, at 25–28.

^{194.} Id. at 25-26.

^{195.} Gary McPherson, Floating on a Sea of Funny Money: An Analysis of Money Laundering Through Miami Real Estate and the Government's Attempts to Stop It, 26 UNIV. MIAMI BUS. L. REV. 159, 164 (2017) (adding that LLCs are popular in real estate transactions).

^{196.} Id. at 165.

^{197.} Id.

^{198.} *Id.* ("You see a lot of safety concerns with people from Brazil or Argentina.... They don't want people from their home country to go and look on the Internet and see that they paid a lot of money for a house and become a target for kidnapping.")

prosecution for other crimes.¹⁹⁹ Criminals have found that real estate transactions through LLCs are an effective way to hide money because the real estate industry is less heavily regulated than the banking industry.²⁰⁰ For example, Alvaro Lopez Tardon, a Spanish drug dealer, purchased thirteen condos and a fleet of luxury cars with \$20 million of profits from his drug smuggling operation, thus laundering money through Miami real estate.²⁰¹

In response to this problem, the Treasury Department has imposed a variety of anti-laundering regulations in recent years. For example, the government requires title insurance companies in some cities to inform the government about the identity of purchasers in high-cost real estate transactions.²⁰² The government also requires that any LLC with an American bank account must establish the identity of persons owning more than 25 percent of the LLC.²⁰³

The existence of money laundering, however, is not a reason to restrict real estate transactions. Criminals can launder money in many other ways: for example, Tardon also laundered his funds by purchasing luxury cars.²⁰⁴ The art market is also highly susceptible to money laundering because art buyers can easily maintain anonymity,²⁰⁵ sellers of art often sell through intermediaries and thus do not know each other's identities, and the intermediaries do not maintain uniform standards for recordkeeping.²⁰⁶ But surely no reasonable legislator would ban the purchase of cars or art in order to prevent money laundering.

Indeed, even commentators most concerned over money laundering do not use this fact to justify restrictions on real estate supply. For example, the relevant section of the IPS report merely endorses public disclosure of "beneficial owners" of real estate—that is, the persons who actually invest in an LLC or a similar entity.²⁰⁷ Even if such disclosure discourages money laundering, it is unlikely to significantly affect real estate markets. In March 2016, the Treasury Department required the disclosure of beneficial owners in all-cash transactions over \$1 million in Miami,²⁰⁸ because large-scale cash transactions are more likely than other

^{199.} Id. at 166; cf. Alessandra Dagirmanjian, Laundering the Art Market: A Proposal for Regulating Money Laundering Through Art in the United States, 29 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 687, 693–94 (2019) (describing money laundering techniques in more detail).

^{200.} See McPherson, supra note 197, at 167 (explaining that banks must file a report with the Treasury Department if the suspect that a client is depositing or transferring money related to criminal activities, while real estate agents have no such requirement).

^{201.} Id. at 172-73. In 2014, Tardon was sentenced to 150 years in prison for money laundering. Id.

^{202.} Id. at 175-76.

^{203.} See Collins & de Goede, supra note 42 at 26 (adding that these regulations might not be effective because not all criminals use U.S. bank accounts and because a business could break ownership into five 20 percent shares in order to avoid disclosure); see also McPherson, supra note 197, at 177–83 (describing other loopholes in regulations).

^{204.} McPherson, supra note 197, at 172.

^{205.} See Dagirmanjian, supra note 201, at 706.

^{206.} Id. at 706; see also id. at 708-11 (adding that uncertainty of art's value may also facilitate laundering).

^{207.} See Collins & de Goede, supra note 42, at 26.

^{208.} Id. at 39.

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transactions to involve illegal activity.²⁰⁹ As a result, the number of cash sales in Miami plunged by 95 percent between March 2016 and July 2018.²¹⁰ Yet housing prices in metro Miami rose by 22 percent during this period,²¹¹ which is the same rate as in other parts of urban Florida.²¹² This fact might mean that criminals found other ways of laundering money,²¹³ or it might mean that sales related to money laundering did not add materially to housing demand and thus are not a significant factor in the real estate market as a whole.

The extent of money laundering in real estate is unclear. However, it is clear that money laundering is not limited to real estate. And the weak impact of Miami's reforms upon housing prices suggests that money laundering may not involve a significant amount of housing. Thus, the existence of money laundering is not a reason to impede real estate construction.

D. Environmental Degradation

The IPS report suggests that high-end condos should not be built because such buildings are "energy hogs, requiring the consumption of new fossil fuel infrastructure."²¹⁴ This argument is apparently based on the fact that "high-rise properties use almost 10 percent more energy per square foot than low-rise properties."²¹⁵ This is the case because high-rises require energy-consuming elevators and artificial ventilation and have more exposure to wind and sun (which means that more resources must be invested in artificial heating and cooling).²¹⁶

But this statistic does not necessarily suggest that cities should discourage high-rises for two reasons. First, the upper-class buyers of the most expensive condos

211. See NAHB/Wells Fargo Housing Opportunity Index (HOI), NAT'L ASS'N OF HOME BUILDERS, https://www.nahb.org/research/housing-economics/housing-indexes/housing-opportunity-index.aspx [https://perma.cc/AVP8-QS4B] (under "Current Data," click "The NAHB/Wells Fargo Housing Opportunity Index: Complete History by Metropolitan Area (2012-Current)") (stating that median home price rose from \$246,000 in the second quarter of 2016 to \$300,000 in the second quarter of 2018.).

212. Id. (indicating that during same period, prices in Tampa rose from \$166,000 to \$201,000, and Orlando prices rose from \$197,000 to \$236,000.).

^{209.} See United States v. Hall, 434 F.3d 42, 52 (1st Cir. 2006) ("Because cash is a frequent by-product of many kinds of illegal activity... [cash transactions are] probative of money laundering." (citation omitted)).

^{210.} Nicholas Nehemas & Rene Rodriguez, *How Dirty is Miami Real Estate? Secret Home Deals Dried up When Feds Started Watching*, MIA. HERALD (July 20, 2018), https://www.miamiherald.com/news/business/real-estate-news/article213797269.html [https://perma.cc/7WVH-36ED].

^{213.} See McPherson, supra note 197, at 178–79 (pointing out that disclosure rules did not cover wire transfers and that sophisticated money launderers can hide identities in wire transfer transactions).

^{214.} See Collins & de Goede, supra note 42, at 26.

^{215.} Transforming Multifamily Housing: Fannie Mae's Green Initiative and Energy Star for Multifamily 13, FANNIE MAE, https://multifamily.fanniemae.com/sites/g/files/koqyhd161/files/migrated-files/content/fact_sheet/energy-star-for-multifamily.pdf [https://perma.cc/W4N4-9TG5] (indicating that "Fannie Mae" is the Federal National Mortgage Association, a federally sponsored enterprise that guarantees mortgages); see also Sec. & Exch. Comm'n v. Goldstone, 301 F.R.D. 593, 600 n. 6 (D.N.M. 2014) (describing Fannie Mae).

^{216.} See Jim Hanford, High-Rises are Energy Hogs, not Climate Solutions, CROSSCUT. (Nov. 28, 2016), https://crosscut.com/2016/11/high-rises-run-counter-to-the-citys-environmental-goals [https://perma.cc/5TK9-S83X].

are not necessarily going to choose low-rise apartments if high-rises are unavailable. Instead, the very rich might choose to live in mansions, like Microsoft co-founder Bill Gates's 66,000-square-foot mansion,²¹⁷ which is far bigger than apartments in even the most grandiose high-rise.²¹⁸ Single-family houses generally use far more energy than apartments,²¹⁹ and bigger houses use more energy than smaller houses.²²⁰ So even if a high-rise uses more energy per square foot than a house, a wealthy household will consume more energy by living in a large mansion than by living in an expensive condominium.

Second, there is considerable variation among high-rises. Federal data shows that the average high-rise property uses 137 kBtu²²¹ per square foot, while the average low-rise uses 125 kBtu.²²² But some high-rises use as many as 400 kBtu, while others use well below 100.²²³ Additionally, some high-rises can be retrofitted to become more efficient; for example, recent improvements to New York's Empire State Building may reduce energy use by 38 percent.²²⁴

Because of these complexities, an attack on high-rises is unlikely to reduce energy consumption. It could be argued, however, that cities should force condominiums to retrofit by limiting the energy use of these buildings.²²⁵ But if cities regulate high-rises without regulating the energy use of suburban single-family houses, they risk encouraging the rich to move to space-consuming mansions that might use even more energy than even the most gilded high-rise.

220. See Bigger Homes: An Energy Choice We'll Be Living with For a Long Time, NAT'L GEOGRAPHIC (June 18, 2012), https://www.nationalgeographic.com/environment/great-energy-challenge/2012/bigger-houses-an-energy-choice-well-be-living-with-for-a-long-time/

[https://perma.cc/SQJ7-L22U] ("Our homes and appliances are more efficient — the Department of Energy says homes built between 2000 and 2005 use 14 percent less energy per square foot than older homes. But since they've also gotten bigger, overall residential energy use is still projected to rise.").

221. KBtu means kilo-British Thermal Units, a measure of energy use. *See* Timothy R. Sloane, *Green Beer: Incentivizing Sustainability in California's Brewing Industry*, 5 GOLDEN GATE U. ENV'T L.J. 481, 490 (2012).

224. Alyssa Danigelis, NYC's Empire State Building Takes Energy Efficiency to New Heights, Energy ENERGY ENV'T & 25, Manager Today, LEADER (Sept. 2017). https://www.environmentalleader.com/2017/09/nycs-empire-state-building-takes-energy-efficiencynew-heights/ [https://perma.cc/E7L7-5F7L]; cf. Kheir Al-Kodmany, Green Retrofitting Skyscrapers: A https://www.mdpi.com/2075-5309/4/4/683 Review. BUILDINGS (Sept. 30, 2014),

Review, BUILDINGS (Sept. 30, 2014), https://www.mdpi.com/20/5-5309/4/4/683 [https://perma.cc/BKZ2-7ZWB] (providing a more technical discussion).

225. See Collins & de Goede, supra note 42, at 36 (suggesting that condominiums should be "Net-Zero-Carbon").

^{217.} See Ilyce Glink, 10 of the World's Most Expensive Homes, CBS NEWS (Nov. 22, 2014), https://www.cbsnews.com/media/10-of-the-worlds-most-expensive-homes/ [https://perma.cc/NNU7-PS33].

^{218.} For example, in New York's 432 Park Avenue (where most units sell for over \$10 million), the largest apartment listed for sale in recent years has 8255 square feet—about one-eighth the size of Gates's house. *See* STREETEASY, *supra* note 39.

^{219.} See U.S. Energy Info. Admin., *Apartments in Buildings with 5 or More Units Use Less Energy Than Other Home Types* (June 18, 2013), https://www.eia.gov/todayinenergy/detail.php?id=11731 [https://perma.cc/4TRA-M3V5] (indicating that single-family homes built in the twenty-first century use over 100 million Btu of energy per household, more than twice that of newer apartments).

^{222.} FANNIE MAE, supra note 217, at 13.

^{223.} Id. (Figure 16 shows wide range of kBtu use for buildings of 20 or more stories.).

V. CONCLUSION

Commentators often blame high-end condominiums for many of the housing problems within modern cities. However, high-end condos arguably serve a beneficial purpose. In fact, the growth of high-end condos is likely to increase housing supply and hold down costs for local residents.

The law of supply and demand applies to housing, and even expensive market-rate condominiums reduce housing costs to some extent by increasing housing supply. Where housing supply is not constrained by the government, housing supply filters down. If expensive new housing is built, the rich purchase such housing and cause housing that was previously used by the rich to become available to persons who are slightly less rich, which in turn increases the amount of housing available to the middle and working classes and lowers rents.

Filtering down occurs even if the newest condominium units are purchased by out-of-town investors for two reasons. First, foreign investors often rent out their units. Thus, even units purchased by foreign investors increase the housing supply available to local residents and cause housing to filter down. Second, if regulation prevents these units from being built, the out-of-town investors do not magically disappear. Instead, these investors will purchase old housing units as well as new ones; when this occurs, demand for the older housing units will increase. Thus, policies that discourage construction of high-end condos will reduce housing supply without reducing demand and will cause housing costs to increase. The policy implications are clear: More market-rate housing, including high-end condos, will make a city more affordable.