Urbaria Summaries Series 2021/11 ISSN 2670-2363



# THE EFFECTS OF INCREASING HOUSING SUPPLY THROUGH MARKET-RATE CONSTRUCTION

**Cristina Bratu** 



# **Urbaria Research Report 2021/11**

# The effects of increasing housing supply through market-rate construction

**Cristina Bratu** Postdoctoral researcher Aalto University



- Increasing housing supply through market-rate construction is often proposed as a solution to soaring housing costs.
- Building more pushes rents and prices down due to increased competition (supply effect).
- New construction may alter the perceived desirability of a neighborhood, thus increasing demand (demand effect).
- Most studies find that the supply effect tends to dominate, but the demand effect is not zero, which may imply gentrification in the longer-run.
- The evidence so far comes from a limited number of cities, predominantly in the United States. More research is needed from across countries and institutional contexts.

Households across OECD countries spend the highest share of their budgets on housing and this share has increased over time (OECD 2021). Households' cost burden is particularly high among renters, as compared to owners with mortgages; the poorest households - those in the bottom quintile of the income distribution - are by far the most affected (OECD 2021). This is no less true in Finland, as Figure 1 shows: the housing cost burden (rents or mortgage) is substantially higher among bottom-quintile renters than among bottom-quintile owners. Various potential solutions have been put forward, but in this report I will focus on one that tends to attract a large number of skeptics: building more new market-rate housing (Been et al. 2019).



Figure 1: Housing cost burden (mortgage and rent cost) as a share of disposable income. Data for Finland, 2010-2019. Source: Author's calculations based on data from the OECD Affordable Housing Database.

### **Theoretical considerations**

All else equal, increasing the supply of housing should put downward pressure on rents and prices. However, this so-called supply effect may be offset by a demand effect: new units may attract higher-income households, new and improved amenities may follow, and the neighborhood as a whole may become more desirable, thus increasing demand. As a result, incumbent residents may not be able to afford their neighborhoods anymore and may ultimately be displaced. The two effects can either counterbalance each other, and then we would observe no effects of new construction; the supply effect could dominate, in which case we would observe rents or prices going down; or the demand effect could dominate, in which case we would observe rents or prices going up. The way in which this plays out may also vary depending on the location of the new development. It is ultimately an empirical question as to which of these effects dominates and how it varies across neighborhood type.

Increasing the supply should put downward pressure on rents and prices. However, this so-called **supply effect** may be offset by a **demand effect** and the neighborhood as a whole may become more desirable, thus increasing demand.

## **Empirical evidence**

#### Methodological challenges

There are a number of challenges researchers have to overcome in order to provide an answer to this question. First, when and **where new buildings are built is not random**. Developers choose to build in areas that are already up-and-coming, which would likely see increases in rents or prices even in the absence of new construction. Therefore, while we may observe a positive correlation between new construction development and rents or prices, it would be wrong to conclude that the new construction was what caused the increase in rents. The challenge comes down to the fact that we cannot observe the state of the world in which the new construction did not take place. It would also be very difficult to randomly assign new buildings to some neighborhoods but not others. Nonetheless, we can try to mimic the attributes of a randomized controlled trial in instances where we can be confident that, for example, the amount of time it takes to complete a new building is random (potentially conditional on other variables). In that case, some neighborhoods will be "treated" with new construction earlier than others and we can use the "not-yet-treated" neighborhoods as a control group. Other sources of so-called exogenous variation can include, for instance, changes in incentives to developers regarding when and where to build, or variation in the location of new construction. All papers that I discuss below take advantage of one or two of these types of variation.

The second issue is **data availability**. Longitudinal data on rents at the unit-level, or at least at the building-level, is often hard to come by. Even harder to come by is data on individual locations over time, which is crucial if we want to study whether new construction affects displacement or gentrification.

#### **Findings**

A growing body of work in urban economics is providing evidence on this topic with new data and credible research designs. I turn to these papers in this section, the majority of which use data from the United States.

#### Dominant supply effects

Asquith et al. (2021) study the effect of new market-rate housing in low-income neighborhoods in 11 cities across the U.S. and find substantial decreases (about 6%) in the rents of units 250m away from the new construction, relative to those located 250-600m away. They also show that while the movers to new buildings are higher-income, new construction nonetheless increases in-migration of lower-income residents. They posit that if there exists a demand effect, it is likely small potentially due to the fact that the neighborhoods experiencing new construction were already changing. When they include all neighborhoods in their analysis - as opposed to only those classified as low-income - they find no significant effects on rents.

Li (2020) studies new high-rise buildings in New York City and finds that for every 10% increase in the housing stock, rents decrease by 1% within a 150m buffer. She also shows that more restaurants and cafes enter neighborhoods after the completion of new buildings. Therefore, she finds evidence for both the supply and the demand effect - as measured by the presence of consumption amenities -, but concludes that the supply effect dominates.

Pennington (2021) studies another city plagued by housing affordability issues - San Francisco. She exploits the fact that in the aftermath of serious fires, developers are more likely to build on the burned lots relative to unburned neighboring lots because of lower construction costs. She finds that rents decrease by roughly 1.2 - 2.3% relative to trend for people living within 500 m of a new project and incumbent residents face a substantially lower risk of being displaced. However, her results also point to the fact that areas close to the new construction are more likely to gentrify. Overall, it seems that new construction can keep rents at bay and prevent displacement but may also slowly gentrify neighborhoods.

#### Heterogeneous effects across submarkets and dominant amenity effects

Damiano and Frenier (2020) use data from Minneapolis to investigate whether new construction has heterogeneous effects across different submarkets and find that rents decrease by 3.2% in higher-income neighborhoods. They argue that this result likely stems from the fact that when new buildings are built in a higher-income neighborhood, there are more closer substitutes to the new buildings in this type of neighborhood than in a lower-income neighborhood, which increases competition and lowers rents. However, they see that rents increase by 6.6% in lower-income neighborhoods, most likely due to a dominant amenity effect. They do not have access to data to investigate this hypothesis further.

Singh (2020) exploits the abolition of property tax benefits on new units in New York City, which incentivized developers to apply for the benefits and build more before the policy went into effect. Her results show that a 1% increase in the rental stock within 150m of existing buildings increases their rents by 1.8%, which points to a stronger amenity affect relative to the supply effect. She tests this hypothesis by looking at neighborhood demographic composition and finds that the number of tenants with a bachelor's degree, who are white and have higher income increases. As in Li (2020), consumption amenities, as measured by the number of sidewalk cafes, also increases. Stronger amenity effects may also explain the findings in Pampillon (2019), who takes advantage of a policy that introduced tax breaks to developers to promote new construction in certain middle-income neighborhoods in Montevideo, Uruguay. He finds that a one standard deviation increase in the intensity of exposure to new construction leads to a 12.1% increase in house prices and hypothesizes that this increase is likely driven by a decrease in property crimes in the short-run and a change in neighborhood composition towards higher-income residents in the longer-run.

#### Summary

The evidence reviewed here on the effects of new construction most often points to a supply effect that dominates amenity effects, if any of the latter exist. Positive amenity effects may lead to the displacement of the poorer incumbent residents and to neighborhood gentrification in the long-run. However, it is important to keep in mind that the presence of positive amenity effects means that a neighborhood becomes a better place. There is ample evidence in support of the claim that better neighborhoods matter for outcomes such as income and education, especially during childhood (e.g. Chetty and Hendren 2018, Chyn 2018, Deutscher 2020, Laliberté 2021). Therefore, complementary policies such as housing subsidies may be needed to offset any negative distributional effects that may arise. Finally, the evidence comes from a limited set of cities, primarily in the United States, and the extent to which we can generalize to other contexts is debatable. More research is needed to inform this discussion.

#### References

Asquith, B. J., Mast, E., & Reed, D. (2021). Local Effects of Large New Apartment Buildings in Low-Income Areas. The Review of Economics and Statistics, 1-46.

Been, V., Ellen, I. G., & O'Regan, K. (2019). Supply skepticism: Housing supply and affordability. Housing Policy Debate, 29(1), 25-40.

Chetty, R., & Hendren, N. (2018). The impacts of neighborhoods on intergenerational mobility I: Childhood exposure effects. The Quarterly Journal of Economics, 133(3), 1107-1162.

Chyn, E. (2018). Moved to opportunity: The long-run effects of public housing demolition on children. American Economic Review, 108(10), 3028-56.

Damiano, A., & Frenier, C. (2020). Build baby build?: Housing submarkets and the effects of new construction on existing rents. Center for Urban and Regional Affairs Working Paper, University of Minnesota. Retrieved from https://www.tonydamiano.com/ project/new-con/bbb-wp.pdf.

Deutscher, N. (2020). Place, peers, and the teenage years: long-run neighborhood effects in Australia. American Economic Journal: Applied Economics, 12(2), 220-49.

González-Pampillón, N. (2019). CEP Discussion Paper No 1660 November 2019 Spillover Effects from New Housing Supply.

Laliberté, J. W. (2021). Long-term contextual effects in education: Schools and neighborhoods. American Economic Journal: Economic Policy, 13(2), 336-77.

Li, X. (2019). Do new housing units in your backyard raise your rents. NYU Wagner and NYU Furman Center, Job Market Paper, 57.

OECD (2021), "Building for a better tomorrow: Policies to make housing more affordable", Employment, Labour and Social Affairs Policy Briefs, OECD, Paris, http://oe.cd/affordable-housing-2021.

Pennington, K. (2021). Does Building New Housing Cause Displacement?: The Supply and Demand Effects of Construction in San Francisco. The Supply and Demand Effects of Construction in San Francisco (June 15, 2021).

Singh, D. (2020). Do Property Tax Incentives for New Construction Spur Gentrification? Evidence from New York City. Job Market Papers.



TOIMITUS / EDIT

liris Koivulehto Kaupunkitutkimusinstituutti Urbaria

#### OTA YHTEYTTÄ / CONTACT

urbaria@helsinki.fi 0294150056 / 0504719810

PL 4 (Yliopistonkatu 3) 00014 Helsingin Yliopisto

#### SEURAA / FOLLOW US

@urbariahelsinki www.helsinki.fi/urbaria