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Spillovers and Subsidized Housing:
The Impact of Subsidized Rental Housing on Neighborhoods

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At a congressional hearing in 1948, representative A.S. Mike Monroney argued that the construction of new, subsidized rental housing improves the surrounding neighborhood, and in so doing, raises property tax revenues. He stated: "One of the principal arguments, with which I go along, is that the establishment of a housing project in a city raises the assessed valuation for blocks around it and puts back onto the municipal tax rolls a great deal more money than is taken off by the land that is occupied by these public housing projects."[1] Congressman Monroney was not alone in his beliefs; when the federal public housing program was first established in the late 1930s, neighborhood benefits were a key justification.

Yet it is hard to imagine a member of Congress making a similar argument today. The current assumption is that the production of subsidized, rental housing, if anything, accelerates neighborhood decline – "there goes the neighborhood" is the common refrain. And partially as a result, we've seen the policy pendulum swing away from place-based housing investment towards demand-side housing programs, such as housing vouchers.

Despite this policy shift, many of the local developers and nonprofits who build and manage subsidized rental housing continue to believe that their efforts not only provide shelter but help to revitalize communities as well, which raises the obvious question: Who is right? This paper aims to revisit this critical policy issue, exploring how and why investments in subsidized, rental housing might affect surrounding neighborhoods. Unlike most of the existing research, which simply asks whether subsidized housing has a negative or positive impact, my aim is to explore the factors that shape the direction and size of the effect. For while recent research on this topic suggests that subsidized rental housing can have very positive impacts on communities, not all housing developments have had similarly positive effects. The aim here is to look across a variety of empirical papers on the topic to glean lessons for policymakers about the types of subsidized rental housing investments most likely to generate positive spillovers to the surrounding community.

Understanding the Spillover Effects of Subsidized Rental Housing

Although subsidized rental housing developments may have less positive impacts on communities than their market-rate counterparts, the likely spillover effect isn't clear and is likely to depend on the housing and the circumstances. Schwartz, Ellen, Voicu, and Schill

[1] Fisher, Robert Moore, *Twenty Years of Public Housing*, New York: Harper & Brothers, 1959, p. 159.

(forthcoming) identify five general mechanisms through which subsidized housing might affect the value of neighboring properties: the removal effect; the physical structure effect; market effects; the population growth effect; and population mix effects. This framework can also be used to analyze how subsidized rental housing might affect neighborhood demographics, services, and quality of life.

Removal Effect

The construction of subsidized rental housing can affect a community simply because of what it removes. In urban areas, subsidized housing often replaces abandoned, boarded-up buildings or littered, vacant lots, disamenities that can signal that the community is disorganized and that criminal activity will go largely unchecked (Skogan, 1990; Wilson and Kelling 1982). The removal of such blight can help to make a neighborhood both more attractive and safe, and thereby catalyze neighborhood revitalization. Of course, subsidized rental housing may also replace a desirable use, like a park, an attractive set of older buildings, or simply open-space. In these cases, removal effects would likely be negative.

Physical Structure Effect

The construction or rehabilitation of a building or set of buildings may also have an independent effect, over and above the removal of the prior use. In particular, if a new subsidized project is viewed as unattractive or not fitting with the existing character of a community, or if a project is not cared for over time, it may detract from the appeal of a community. Alternatively, an attractive, high-quality, well-maintained building that fits in nicely with the design of existing properties can enhance the overall design and appearance of a community.

Market Effects

Developers sometimes avoid blighted neighborhoods because they fear that investments there won't be profitable. By ensuring a certain level of activity, subsidized housing developments may help to allay such fears. Moreover, if subsidized developments include market rate units, they may signal to developers that an area is viable and thereby attract additional investment. On the other hand, the creation of new subsidized housing may also have a depressing effect on the neighborhood by glutting the local market with low-rent housing and

crowding out unsubsidized, private investment (see Murray 1999; Sinai and Waldfogel 2002; and Malpezzi and Vandell 2002).

Population Growth Effect

The construction of new housing is likely to increase population, which might in turn make local streets safer and promote new commercial activity.[2] At the same time, such growth might result in congested streets, overcrowded schools, and strains on local police and infrastructure.

Population Mix Effects

The impacts of new housing may depend not only on how many people move into but who moves into it, and how their incomes and ethnicity compare to those of existing residents. Such changes may not be linear – lower-income inmovers may make little difference in high-income areas, while reductions in income in neighborhoods that already have high concentrations of poverty and joblessness may be detrimental (see Ellen and Turner, 1997).[3] The racial or ethnic composition of occupants may be relevant as well. Research has shown that after increases in the black population in a community, white households – and white homeowners in particular -- tend to report lower neighborhood satisfaction and are more likely to move (Ellen 2000). Other research suggests that during the 1970s and 1980s, housing prices were typically lower in neighborhoods with greater shares of non-whites (Kiel and Zabel, 1996).

Finally, the construction of subsidized rental housing may also lead to a more stable population, and a more stable community in turn, since households living in subsidized housing tend to live in their units for longer periods of time.

Naturally, the size and direction of all these effects are likely to vary across programs and even particular projects, depending on what the housing replaces, the size, design, and upkeep of the development, the characteristics of the tenants, housing market conditions, and the characteristics of the surrounding neighborhood. In general, we expect that investments in housing – the rehabilitation of old housing or the construction of new housing – would have

2 Of course, if the subsidized construction fully crowds out private construction, then the population will remain steady. But while most research on this topic finds evidence of crowding out, no paper has found it to be complete (see Murray 1999 and Sinai and Waldfogel, 2002).

3 Children growing up in communities characterized by high rates of poverty and joblessness will be disadvantaged by their lack of exposure to role models of successful working adults. Crime may increase as alternatives are less apparent, and local schools may struggle, perhaps because they face difficulties in recruiting strong teachers or because local parents are typically less educated (see Ellen and Turner 1997).

positive spillovers on the surrounding community, especially when that housing replaces an abandoned or otherwise blighted site. But those positive impacts might be tempered to some degree by poor or incongruous design, deficient management and upkeep, and/or by the perception that tenants – either because of their lower relative incomes or different ethnic compositions – will make undesirable neighbors.

Existing Evidence on the Spillovers of Subsidized Rental Housing on Property Values

Actually identifying and quantifying the neighborhood spillover effects generated by housing investment is quite difficult. The first challenge lies in measuring any neighborhood improvements. Sources of data are hard to come by, and many of the outcomes we would wish to capture (e.g., social capital and collective efficacy) are difficult to quantify.[4] However, because land is immobile, to the extent that any of these outcomes occur, they should be capitalized into, or reflected in higher property values. Put simply, if a neighborhood becomes a better place to live, people will be willing to pay more to live there. Thus, much of the existing research measures neighborhood benefits by increases in the value of surrounding properties.[5]

Given the conventional view that subsidized rental housing developments, if anything, help to accelerate neighborhood decline, it is perhaps not surprising that the papers on this subject have virtually all been framed to ask whether these subsidized housing developments reduce surrounding property values.[6] Yet, contrary to the conventional wisdom, empirical research yields inconclusive evidence about the nature of spillover effects generated by subsidized rental housing. Most of these past studies either rely on cross-sectional data or do not have access to project completion dates and therefore cannot determine whether subsidized housing is systematically located in weak/strong neighborhoods, or whether subsidized housing

[4] Collective efficacy is defined as the willingness of local residents to intervene for the common good. For more on the concept, see Sampson, Raudenbush, and Earls (1997).

[5] Of course, it may be true that neighborhood changes occur even when little change in property values is apparent, perhaps because these underlying changes in services and conditions cancel one another out. Consider the effects of an increase in population resulting from new housing. On the one hand, this increase is likely to make a neighborhood safer; on the other hand, it may lead to unwanted noise and congestion.

[6] One exception is Nourse (1963), which considers whether federally-subsidized housing might deliver *benefits* to the surrounding neighborhood. But this paper was published way back in 1963, almost 10 years before the demolition of Pruitt Igoe, a time when attitudes about subsidized rental housing clearly differed.

leads to neighborhood decline/improvement [see, e.g., Green, Malpezzi & Seah, 2003; Lee, Culhane & Wachter, 1999; Lyons and Loveridge, 1993].[7]

Recently, several studies have attempted to disentangle the causality problem by estimating impacts based upon a comparison of price changes of properties within the vicinity of new housing to price changes citywide, while controlling for idiosyncratic features of the neighborhood (typically through census tract fixed effects). Briggs, Darden, and Aidala (1999), for instance, use a census tract fixed effects model to examine price changes surrounding seven scattered-site public housing developments on property values in neighborhoods in Yonkers, New York. They find little effect on the surrounding area. Santiago, Galster, and Tatian (2001) use a similar model to estimate the impact of the Denver Housing Authority's scattered site public housing program on the sales prices of surrounding single-family homes. Testing for both changes in price levels and trends after completion, they find that proximity to dispersed public housing units is, if anything, associated with an increase in the prices of single-family homes.

While these two studies go a long way to question the common belief that scattered-site public housing reduces the value of surrounding properties, neither reveals anything about possible differences in impacts across different types of programs.

Together with colleagues at New York University, I have written a series of paper investigating the impacts of subsidized, rental housing in New York City.[8] While limited to a single city, these studies offer more opportunities to compare impacts across programs in part because of the sheer scale of the activity in New York. Between 1986 and roughly 2000, New York City engaged in a massive effort to rebuild its housing stock, funded with a mix of city, state, and federal dollars. Much of the effort was focused on the large stock of dilapidated housing and vacant land that the city had acquired through tax foreclosure proceedings during the 1970s. During this roughly 15-year period, the city utilized close to 100 different programs and built or rehabilitated nearly 200,000 units of housing, most of it rental. (Specific program features differed, but in general, the city gave land and/or buildings together with low-interest financing to nonprofit or for-profit developers, who would then undertake the rehabilitation or construction and

[7] Green, Malpezzi and Seah (2003) estimate a repeat sales model and utilize an interesting gravity measure of distance to LIHTC development sites. Nonetheless, they do not have access to project completion dates, which makes it impossible to interpret their coefficients on distance as impact measures. To do so, one has to assume that the coefficient on distance to LIHTC sites was zero *before* project completion.

[8] See Ellen, Schwartz, Voicu, and Schill (forthcoming); Ellen and Voicu (2006); Schwartz, Ellen, Voicu, and Schill (forthcoming); and Schill, Ellen, Schwartz, and Voicu (2002). Note that the latter two papers also explore neighborhood impacts of owner-occupied housing, but the bulk of the housing studied is rental.

ultimately own and manage the buildings.) Moreover, another 58,000 units of federally-subsidized rental housing were also built in New York City between 1977 and 2000, through the Section 8, Section 202, and Public Housing programs.[9]

The unique scale of the efforts gives us statistical power to identify impacts. And the diversity of the city's neighborhoods as well as its programs allows us to compare and contrast the impacts of different programs (both federal and local) in different circumstances.

While the specifications differ across individual papers, the core model used is a hedonic regression model with a difference-in-difference specification. Intuitively, the estimated impacts are the difference between the change in property values in the vicinity of subsidized housing investment before and after the investment and price changes of comparable properties farther away, but still in the same neighborhood. We include census tract fixed effects to control for idiosyncratic neighborhood characteristics and neighborhood*time interaction variables to control for idiosyncratic price trends in the local neighborhood. We also include variables that allow us to investigate the extent to which impact estimates vary with project size, housing characteristics, and submarkets in the city.

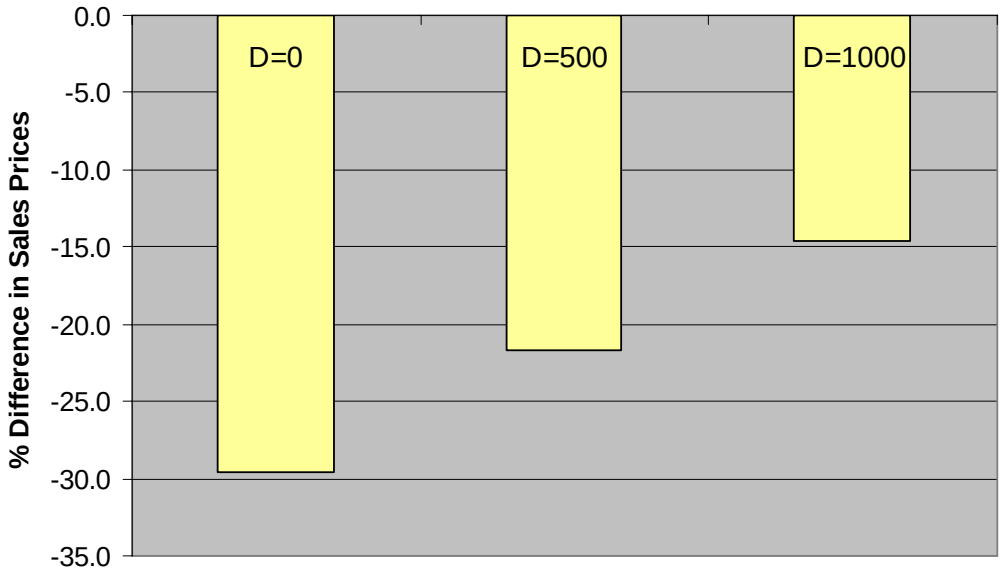
In general, our papers find that the city-assisted programs have had significant, positive effects, far larger than those estimated for subsidized housing in other cities. Prior to rehabilitation or construction, these city-assisted housing sites – which were typically abandoned properties or vacant lots that the city had taken over for tax foreclosure during the 1970s – appear to have significantly depressed the value of neighboring properties.

Specifically, as shown in Figure 1, for the typical city-assisted project, properties located right next to the original, abandoned properties (distance = 0) sold for almost 30 percent less than comparable properties located further away but still in the same neighborhood. As expected, the price discount declines with distance from the site. Nonetheless, as the figure also shows, prices remained significantly lower 1,000 feet away from assisted housing sites. Specifically, the prices of properties located 1,000 feet from assisted housing sites (distance = 1,000) were almost 15 percent lower than the prices of comparable properties selling at the exact same time in the surrounding neighborhood. We cannot say for sure that these blighted, city-owned sites fully explained the lower property values in the 1,000-foot rings surrounding them, but it is likely that

9 There were also roughly 20,000 units built through the Low Income Housing Tax Credit program, but most of these units also received city assistance through the city's Ten Year Plan for Housing and are thus counted in the total number of units assisted by the city (Schill, Ellen, Schwartz, and Voicu, 2002).

they were a contributor.

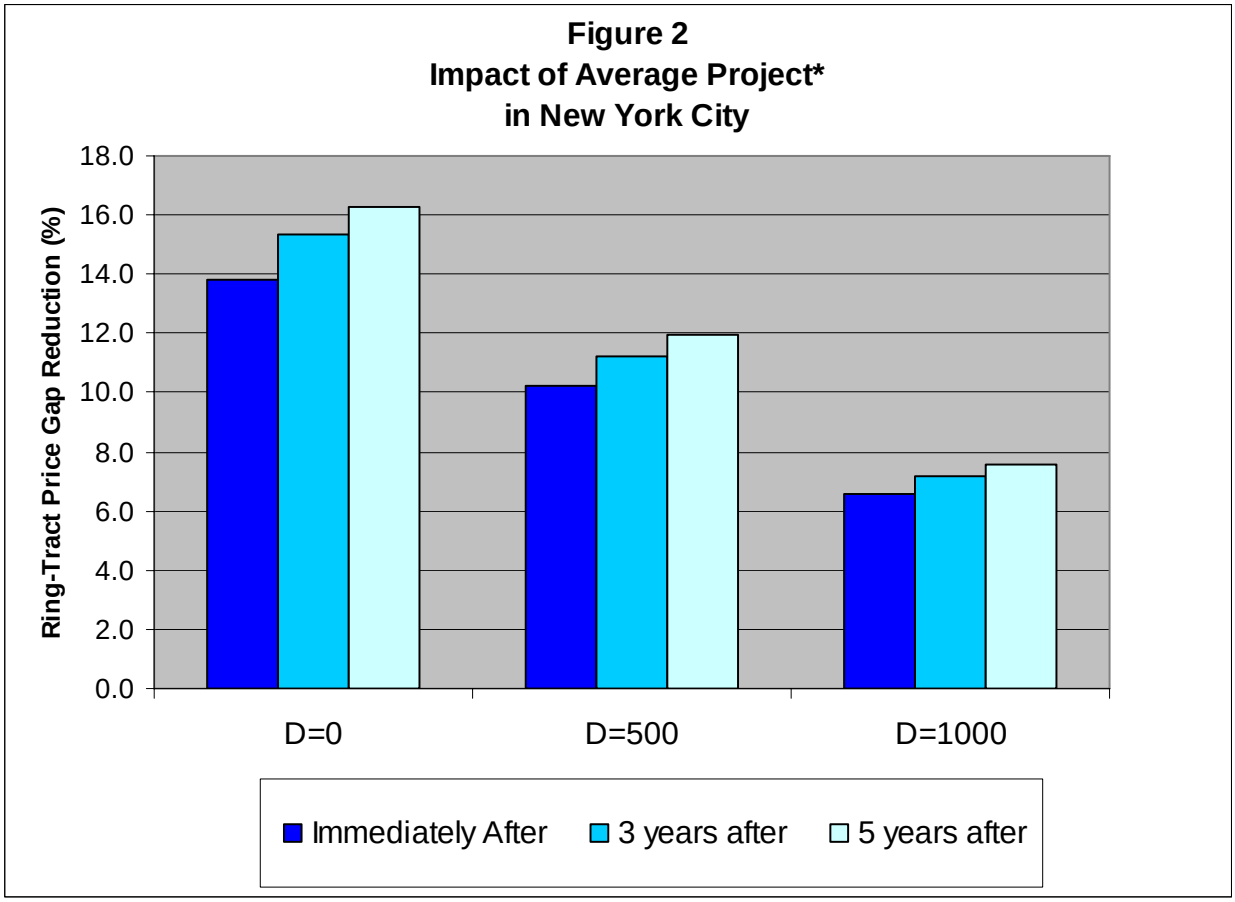
Figure 1
Baseline Price Differences Between Properties Located Close to City-Assisted, Rental Housing Sites and Surrounding Neighborhood*
New York City



* Estimates are for the "average" city-assisted rental project, defined as the (rental) project in the vicinity of the average sale within 2,000 feet of city-assisted rental housing units. This is a project of 127 units.

A second, and perhaps more critical, result is that New York City's investment in these abandoned, tax-foreclosed properties appears to have yielded significant, positive benefits. Figure 2 shows the extent to which the gap between prices of properties near assisted housing sites and those in the surrounding neighborhood fell after completion, or in other words, how much prices rose in the vicinity of the subsidized housing relative to other comparable properties in the same neighborhood. Immediately after completion, prices of properties right next to city-assisted housing sites rose by 8.9 percentage points more than the prices of properties in the surrounding neighborhood. Moreover, these impacts grow over time, perhaps as families move into the housing and the population rises. Five years after completion, properties next to the city-assisted housing had appreciated 11.4 percentage points more than other comparable properties in the neighborhood.

Impacts shrink with distance from the city-assisted housing, as one would expect, but the figure shows significant positive effects at 1,000 feet away from subsidized housing investment as well. Building more units appears to bring a greater benefit, though this marginal effect declines as the number of units increases.



* Estimates are for the "average" city-assisted project, defined as the project in the vicinity of the average sale in a 2,000-foot ring. This is a project of 250 units, out of which 55.5% are rental-multi-family units.

Our analyses suggest that these relationships are causal, i.e., that the investments that New York City made during the 1980s and 1990s to build new subsidized housing and rebuild dilapidated properties as affordable housing have generated improvements in the surrounding neighborhoods. While there are plausible alternative explanations for these price patterns, the evidence does not support them. For example, although city officials may have wanted to pick "winning" sites where prices were going to appreciate anyway, even in the absence of investment, they had little latitude in their selection. By the end of our study period, virtually all

available sites in New York City had been developed. Moreover, the results are robust to various different specifications and statistical techniques.

The magnitude of these neighborhood benefits appears to be substantial. Our analysis of costs and benefits suggests that New York City's housing investments delivered a tax benefit to the city that exceeded the cost of the city's subsidies and amounted to some 75 percent of total public investment, which includes both state and federal dollars.[10] It is worth emphasizing that in these calculations we did not consider the benefits enjoyed by the households that actually reside in the new subsidized housing. Adding such individual benefits would yield even more favorable estimates.

Our research on federally-assisted rental housing in New York City yields more mixed conclusions (see Ellen et al, 2006). We find evidence that housing produced through the Section 202 and Low Income Housing Tax Credit (LIHTC) programs generate sustained increases in property values in the surrounding community. By contrast, Section 8 and public housing appear to lead to reductions in property values, although these initially negative effects diminish over time, and in the case of public housing, dissipate within three years of completion. Further, impacts are very sensitive to scale, with larger Section 8 and public housing projects generating more negative impacts. Interestingly, however, these marginal impacts diminish with scale, at least in the case of public housing. In other words, while larger projects generally result in larger initial declines, adding another unit to a 500-unit public housing development has a less negative effect than adding another unit to a 100-unit development.

In summary, the New York City research suggests that housing created through the Section 202 program, the LIHTC program, and New York's many local housing programs delivered significant neighborhood benefits. (Since many of the city programs utilized tax credits, there is in fact considerable overlap between the latter two categories.) By contrast, the research finds that housing built through the Section 8 and Public Housing program are associated with reductions in property values, at least initially.

Exploring the Heterogeneity of Impacts

The discussion above makes clear that impacts differ across programs and circumstances. A key question for policymakers is why. Why, for instance, did the tax credit developments and

[10] For more detail on these tax benefit estimates, see Schwartz, Ellen, Voicu, and Schill (forthcoming).

the city-sponsored housing in New York City appear to generate more positive impacts than housing built through the Section 8 and Public Housing programs? This section aims to summarize what the existing research can tell us about the types of housing investments most likely to generate positive community spillovers. I focus mostly on the differences in impacts across housing programs in New York City (both federal and local), since most other studies examine a single program. Where possible, however, I also speculate about the root causes of differences between New York City findings and those in other cities, as well as impact differences found within studies examining assisted housing built outside of New York City.[11]

Siting

Existing research offers some lessons about where to site new housing. The experience of New York City suggests that focusing on blighted sites can lead to greater spillovers. As compared to federal efforts in the city and most housing programs elsewhere, the New York City programs more explicitly focused on neighborhood revitalization. One of the key aims of the city's housing efforts – evident from speeches and documents describing the program – was to revitalize the neighborhoods that had suffered from disinvestment and arson during the 1970s (Schill et al, 2002). As a result, city officials in New York chose sites (either buildings or vacant land) that were extremely blighted. This focus on improving blighted sites may help to explain the greater benefits delivered by city-assisted housing.

The evidence is more mixed about what neighborhoods to build in. On the one hand, the research in New York suggests that average-sized projects generate more positive impacts in neighborhoods that are more distressed (Schwartz et al, forthcoming). On the other hand, the spillover benefits of very small projects developed in New York appear to be lesser in more distressed or blighted neighborhoods, perhaps because building just a few new housing units in a highly blighted area may simply not be enough to make a difference.[12] Moreover, the research on federally-subsidized rental housing suggests that adding significantly more subsidized housing and low-income households to already vulnerable, low-income communities can be

11 I turn mostly to the two studies employing data and methods closest to the New York City studies: Briggs, Darden, and Aidala (1999) and Santiago, Galster, and Tatian (2001).

12 In general, city officials were fairly systematic about the sequence of investment, staging their efforts so that investments were clustered and full blocks and groups of blocks were rehabilitated at the same time, which may have helped to enhance neighborhood benefits (Schill et al, 2002).

harmful. Ellen et al (forthcoming), for instance, find that the effects of Section 8 housing are more negative in lower-income areas. Similarly, Santiago, Galster, and Tatian (2001) find that while scattered-site, public housing generates positive effects in affluent, white areas; it leads to consistently negative spillover effects in substantially black, low-income communities.

Scale

In general, we expect larger projects to have more dramatic effects (either positive or negative) on a community. And this is typically what the research finds. Lyons and Loveridge (1993), for instance, find that greater numbers of subsidized units are associated with larger reductions in property values. Similarly, Ellen et al (forthcoming) find that larger public housing and Section 8 projects generate more negative impacts. Meanwhile, studies finding positive impacts tend to find that impacts of larger projects are more positive (Schwartz et al, forthcoming; Santiago, Galster, and Tatian, 2001).

That said, the studies examining subsidized housing in New York find evidence that scale effects are non-linear. Specifically, the marginal effects of additional subsidized housing units – whether positive or negative – tend to diminish in magnitude with the number of units (Schwartz et al, forthcoming, Ellen et al, forthcoming). In other words, contrary to what many believe, the impact of adding another housing unit will actually be smaller in a larger development.

Type of Housing

Few clear lessons emerge about different types of housing. Structure type is surprisingly irrelevant in the New York City studies; the magnitude of the spillover effect is unchanged whether the subsidized housing is comprised of single-family homes, 2-4 unit buildings, or multifamily apartment buildings (Schwartz et al, forthcoming). Of course, it is very possible that neighbors are more sensitive to structure type in other, lower density cities. Indeed, among studies outside of New York City, the two that find the most positive impacts are those that examine scattered-site, public housing, which is typically comprised of in-fill, single-family and 2-family homes (Santiago, Galster, and Tatian 2001; Briggs, Darden, and Aidala, 1999).

As for type of construction, the New York City studies also fail to find any difference between the neighborhood spillover effects of units created through the rehabilitation of vacant buildings and those generated by in-fill, new construction projects, suggesting perhaps that the

presence of an untended vacant lot can be as destructive to the surrounding community as a vacant, dilapidated building (Schwartz et al, forthcoming).

Tenant Characteristics

Unfortunately, no study has had access to project-specific information about tenant characteristics. However, we can make assumptions about tenant characteristics given the rules of the programs governing the developments. For example, in their analysis of federal rental housing programs, Ellen et al (forthcoming) find that housing programs targeted to the elderly typically have more positive impacts than those aimed at families, suggesting that low-income elderly tenants are typically more welcomed, or less feared, than low-income families. In addition, among the programs targeted to families, those that house the lowest income tenants (Section 8 and Public Housing) have the most negative effects. That said, these initially negative impacts do appear to dissipate fairly quickly, at least in the case of public housing.

Significantly, however, in examining the impact of the New York City programs, we did not find any evidence that the share of homeless tenants in a project depressed benefits (Schill et al, 2002). This may be because the programs in New York City all aimed to achieve some mix of incomes, so formerly homeless families were housed together with working families.

Indeed, one reason why the city-sponsored efforts in New York City appeared to yield more positive impacts than the traditional federal programs may be just this focus on income mixing. As compared to federal programs, the city-run programs in New York City placed a fair amount of emphasis on mixing incomes within projects. Rather than concentrating the very poorest households in particular neighborhoods or projects, the city programs generally aimed to house a mixture of low and moderate-income tenants (Salama, Schill, and Roberts 2003).

Management and Ownership

No studies to date evaluate the impact of the quality or style of management. We can, however, draw some inferences about ownership. Ellen and Voicu (2006), for instance, find some differences between the impacts of housing developed by nonprofit and for-profit organizations. In particular, neighborhood spillover benefits appear to be somewhat more sustained over time when rehabilitation projects are undertaken by nonprofit developers. This finding is consistent with theoretical predictions. In the presence of information asymmetries

with respect to housing quality, nonprofits are likely to invest more in developing and maintaining features that benefit the broader community than their for-profit counterparts.

However, in the case of small projects, nonprofit organizations appear to deliver significantly smaller neighborhood benefits than their for-profit counterparts. The fact that scale makes such a difference to nonprofit impacts may be explained by the capacity issues that often challenge smaller nonprofits. It might also reflect the fact that projects developed by smaller nonprofits typically lack community amenities.

The fact that the public housing developed in New York City appears to have yielded lesser positive neighborhood impacts than the projects that are owned and managed by private developers may also be rooted, at least in part, in the different incentives, resources, and constraints faced by public and private actors. (That said, the housing program that appears to deliver the most negative spillover effects is Section 8 housing, which is also privately-owned.)

Finally, the most important distinction may be between federal and local programs. The housing built through city-assisted programs in New York appears to have generated significantly more positive neighborhood benefits than housing built through federal programs. (And one of the two federal programs that appeared to generate positive impacts was administered locally, in partnership with private developers – the Low Income Housing Tax Credit Program, while the other was aimed at the elderly.) Perhaps local policymakers and developers simply have a greater motivation, as well as greater capacity due to their local knowledge, to build housing that will benefit the surrounding community.

Context: Is New York City Simply Different?

Given that the housing delivering the greatest benefits is found in New York City, it's worth exploring the New York context. Many of the features that appear to have worked so well in New York City – the focus on income mixing and neighborhood revitalization – could surely be transplanted to other cities and to other times. But it is also possible that New York City is simply different, as we hear all the time. Certainly, it is hard to imagine other cities replicating New York's efforts at the same tremendous scale.

Moreover, while additional housing might trigger the removal of buildings from the housing stock in weak markets, public subsidies for housing production and rehabilitation may serve as far more effective spurs to neighborhood revitalization in tighter housing markets such

as New York City. During the 1990s, the city's population was growing rapidly and structural barriers inhibited the construction of affordable, private housing. The result was a very tight housing market. New York's extraordinarily high density may also magnify spillover effects, since buildings have more close neighbors. So some caution is warranted in extrapolating the conclusions here to other cities, especially those that are economically weaker.

Conclusions

In summary, the evidence clearly fails to support the notion that subsidized rental housing will in general depress neighborhood property values or otherwise undermine communities. Both theory and existing evidence suggest that the neighborhood impacts of subsidized, rental housing will differ depending on where it is built, the scale of the development, the characteristics of its tenants, and the nature of ownership and management. Reading across these studies, we can identify a few guidelines for policymakers who wish to make the types of rental housing investments most likely to deliver neighborhood benefits.

First, in siting housing, policymakers should pay attention to what is being replaced. Housing that replaces an existing disamenity will naturally benefit a community more than housing that replaces an otherwise desirable use. Even in affluent communities, there are often unattractive and underutilized sites that depress the value of surrounding properties. Attention should also be paid to the larger neighborhood context. Renovating a single home on an otherwise abandoned block is likely to do little. That said, concentrating too much lower income housing in already low-income and vulnerable neighborhoods may be harmful. And of course, policymakers should consider impacts on tenants too; who are likely to do better when living in more economically integrated communities.

Second, tenants matter, but perhaps not as much as people think. The experience of city-assisted housing in New York suggests that the share of formerly homeless families in a development makes little difference to neighborhood impacts. That said, there is at least suggestive evidence that developments that have some mix of incomes (such as those developed through New York City's programs) may yield greater benefits to the surrounding area.

Third, scale matters. Projects need to be large enough, especially in distressed areas, to overcome the blight around them. But they need not be too large. In New York City, we find that the marginal effect of an additional unit appears to diminish with overall size. Thus when

housing delivers benefits, total benefits will be maximized through building a set of moderate-sized developments in several neighborhoods, rather than a single, very large development.

Finally, research in New York suggests that housing created through local government programs has done more to benefit surrounding neighborhoods than that created through federal programs, due to differing incentives and/or knowledge. And local governments will be well-served by providing housing subsidies to either nonprofit or for-profit organizations, though there appears to be greater heterogeneity within the nonprofit sector (Ellen and Voicu 2006).

Other factors are likely to matter too, but researchers have yet to explore them. The extent of ongoing maintenance is likely to be important, for instance. The nature of the design, and the extent to which it fits into the existing character of the community are also likely to make a difference. Indeed, one of the unique features of the subsidized housing produced in New York City is that much of it was created through the gut rehabilitation of vacant, uninhabitable buildings. While these buildings were no more than shells, the city chose not to demolish them and use the existing structure for new housing units. By definition, this meant that the new housing built by the city fit in with the existing neighborhood context.

In future work, researchers should explore these critical policy issues. Clearly, the notion that all subsidized rental housing depresses property values and undermines a neighborhood is simply wrong. The experience of New York City suggests that well-designed, well-managed projects built on distressed sites can play an important role in helping to revitalize a community. But it behooves us to move further on this research to give clearer guidance to policymakers about the particular features that make housing investments more effective in different markets and communities.

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