

Why is Gentrification a Problem?

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1. Introduction

Social and political concerns with gentrification have waxed and waned since the term was first coined in 1964 to describe the movement of middle class families into the former working-class neighborhoods of London. Since the term “gentrification” was first used, the phenomenon has been a source of debate for both scholars and policy makers in the US, Europe and elsewhere. Some authors have viewed it as a beneficial (or at worst neutral) undoing of the “white flight” abandonment of central city neighborhoods that took place in many cities during the period from the mid-1940s through the late 1960s. Perhaps this gentrification would return some wealth, tax base and a modicum of affluence to urban neighborhoods that had been hard hit by loss of businesses, jobs and tax-payers.

Alternatively, gentrification has been viewed (at a minimum) as an unfortunate desecration of interesting and “authentic” urban neighborhoods, a dilution of vibrant ethnic neighborhoods into something that is bland and uninteresting. At worst, the critics of gentrification have viewed the phenomenon as a major source of disadvantage for low income urban residents who, having established a community with all of its complex social networks must now see it torn apart as they are displaced – either by choice or compulsion – to move to other housing that is less desirable or alternatively remain behind to pay higher rents in a neighborhood they no longer feel is their own.

One other perspective deserves separate mention. This is that gentrification may or may not be unfortunate for the original or displaced residents, but that it is a “natural” or even “organic” part of urban development. Thus Brueckner and Rosenthal (2009) see gentrification as a natural consequence of the process of ageing with a durable housing stock, and present a model that has gentrification as a predicted outcome that can be expected to eventually take place in all cities. A related perspective might accept that gentrification has adverse consequences, but that policies designed to prevent any gentrification would be worse. Such anti-gentrification policies might encourage an urban environment in which economic classes or ethnic subgroups have particular neighborhoods to which they are entitled; and where one ethnic group is entitled others may be excluded. From this, it is feared, it is a short step to say that these are the neighborhoods to which they should be restricted.

Recent history presents a variety of perspectives about who constitutes the “gentrifiers” and the “displaced”. In 1983, for example¹, a proposal by then New York City mayor Ed Koch to build 117 apartments for artists in the lower east side of Manhattan was defeated after an acrimonious hearing by the city Board of Estimate. One opponent called the proposal “a scam ... that would gentrify a neighborhood with the young, the white and the rich.” A supporter, a gallery owner in SoHo, defended the plan to use federal housing funds to build the units saying that “... artists, by their nature, are an integrated race of people.” Almost three decades later, artists living in the area have been mostly pushed out of the neighborhood, and complain about being displaced by gentrification.

Much of the research that has been done concerning gentrification has focused on whether gentrification imposes particular harm on poor households, and whether these households are displaced into worse housing situations. Thus Schill and Nathan (1983) conducted surveys of

¹ See Carroll (1983)

displaced residents from gentrifying neighborhoods in five different cities. They found that displaced residents did not live in worse conditions following their moves. The majority of the displaced reported increased levels of satisfaction with their home and neighborhood and commute times were more likely to decrease after the move.

Subsequent careful research has continued to find only limited evidence that the displaced poor are disadvantaged relative to their previous housing arrangements, although this may depend on the particular urban context. Atkinson (2000) found substantial displacement occurring in London, with most of the displacement among those employed in unskilled or semi-skilled occupations. In the US context, however, Freeman and Braconi (2004) presented data that suggested the poor are not differentially likely to be displaced, and Vigdor (2002) examined Boston data that suggested that while some displacement does take place the poor are not clearly harmed by the displacement.

In this paper we argue that by focusing on the individuals who are displaced from the neighborhoods by gentrification and sometimes only on the displaced poor, analysts have been considering the wrong problem and looking for harm in the wrong places. We argue that gentrification is more interestingly considered as a problem for the neighborhoods and communities that are potentially subject to gentrification, rather than the individual poor households that reside in or might move away from those areas.

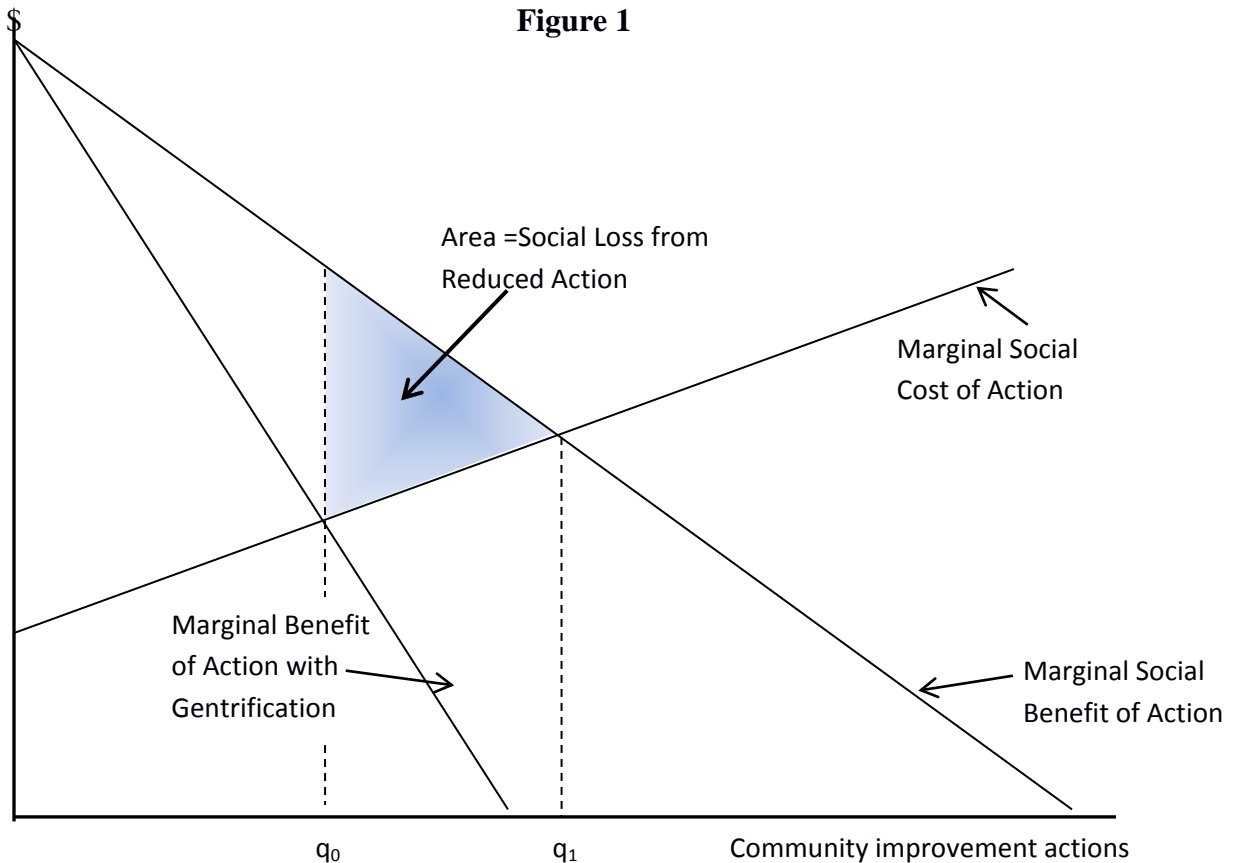
In the view presented here, the risk of displacement from gentrification changes the incentives that residents have to engage in any of the variety of activities that can improve a community. These “community improvement actions” are privately-produced public goods. These actions can be difficult and are generally costly to undertake, and they confer benefits on many other residents of the community. They are therefore subject to chronic under-provision, and communities evolve a variety of social mechanisms to reward these actions and try to move provision closer to the socially efficient level. The risk of displacement due to gentrification makes this more difficult and as a result imposes a social cost on the neighborhood. This cost is borne by the community as a whole and not by only those persons who are poor or those who are displaced.

In this view, it need not be surprising that individuals who are displaced might not be made worse off. It is also not required that the poor be more likely to be displaced than middle class residents. These social costs of gentrification can arise in either situation. In fact, if middle class or lower-middle class households are more likely to contribute to or undertake community improvement actions than the poor, then subjecting them to an increased probability of displacement makes the social cost of gentrification more severe.

Measuring the extent of such costs cannot be done by comparing the quality of housing and neighborhoods occupied by displaced households. That is using the wrong counter-factual. Instead we should be asking what levels of community improvement actions would be taking place if neighborhoods were not subject to the elevated levels of turnover that gentrification displacement brings.

2. External costs of gentrification

In order to better understand the potential social cost of community instability, consider Figure 1 below. This diagram is constructed to illustrate in simplified form the relationships between efforts to improve neighborhoods and communities (community improvement) and associated dollar value to represent the costs and benefits of these actions.



In Figure 1, the upward sloping line labeled “Marginal Social Cost of Action” represents the cost to the community of community improvement actions. These actions require resources (even if they are donated or volunteered) and those resources could be used for other purposes. As more resources are applied to community improvement they become more difficult to find, recruit or purchase so the relationship slopes upwards.

There are two downward sloping lines in Figure 1, one labeled “Marginal Social Benefit of Action” and the other “Marginal Benefit of Action with Gentrification”. The Marginal Social Benefit line represents the value to the community of undertaking community improvement actions. It is the sum of the benefit experienced by all community members, over a lifetime of living in the community, of the community improvement actions. It is downward sloping under the assumption that the community undertakes the highest priorities in the community first, generating the highest value benefits, then the next highest, and so on. As long as the benefit of a community improvement action exceeds the cost to the community of the resources used in the action, it is desirable to undertake the action. The ideal situation for the community is to engage

in q_1 community improvement actions, undertaking all those community improvement projects that satisfy this “cost-benefit” test.

If the community is well-organized (or perhaps we should say “perfectly” organized) then it will have devised some institutions and methods to support and encourage its citizens to undertake these community improvement actions. It will identify all those persons in the community who stand to benefit from the community improvements and convince them to contribute their own resources, time and efforts towards these actions in an amount that equals their individual marginal benefit of the actions experienced over a lifetime in the community. Even if the community is thus successful in overcoming the “free rider” problem (in which some members of the community do not contribute because they hope to benefit from the efforts and expenditures of others) a problem may arise if many residents are at risk of displacement. Suppose that each private resident believes that there is a 50% chance that he or she will be compelled to leave the community because gentrification forces rents to unaffordable (or unattractive) levels or for other reasons. In such a situation the expected value of the benefits of community improvement actions will be significantly reduced to persons who are at risk of displacement. As a result they will value their own benefits to be received from community improvement at a reduced level, indicated by the Marginal Benefit of Action with Gentrification line.

When a community is subject to gentrification, its residents may value community improvement at less than the true social value. As a result, even if they are persuaded to contribute the full value to them of community improvement, they will only view actions up to amount q_0 as satisfying the cost-benefit test. This is less than the socially efficient amount of community improvement which is represented by q_1 . The Marginal Social Benefit of Action represents the “true” social benefit because, even though some existing residents may be forced or induced to leave the neighborhood because of gentrification, they will be replaced by new residents who arrive and will enjoy the benefits of the community improvements undertaken before they arrived. The Marginal Social Benefit of Action takes this benefit received by the “gentrifiers” into account. By undertaking only q_0 community improvement actions rather than the efficient amount q_1 , the neighborhood is losing out on the benefits that could be obtained by adding the $q_1 - q_0$ actions where Marginal Social Benefit exceeds the Marginal Social Cost. The amount of the loss is the shaded triangular area in Figure 1 labeled Social Loss from Reduced Action. This social loss is why gentrification is (or might be) a problem even without consideration of the distributional impacts of gentrification or the costs of moving. This social cost arises even if the poor are no more likely to be displaced from a gentrifying neighborhood than middle-class residents.

Traditional analysis of gentrification has tended to neglect this potential cost for one or more of three reasons:

- The possibility that higher risk of displacement would lead to undervaluation of community improvement did not occur to the analyst
- The possibility was recognized, but the analyst assumed that all or most of the community members were home owners, and that the value of community improvement benefits would be reflected in – “capitalized into” – the value of the homes. Community members might not continue to live in the neighborhood but if the actions were

undertaken they would either directly enjoy the stream of benefits OR would sell their home at a higher price reflecting the present value of the stream of benefits and thus get to enjoy the benefits indirectly. In any event their personal evaluation of the benefits would reflect the full value, and the gap between the Marginal Social Benefit and the Marginal Benefit with Gentrification would be very small or non-existent.

- The analyst recognized that not all in the community were home-owners, but assumed that in the case of renter-occupied property the landlord would have an incentive to contribute towards the community improvement actions in amounts reflecting the benefits to be received by current and prospective future tenants, because the value of these benefits could be recovered through higher rents.

The final reason for ignoring the role of gentrification listed above is of particular interest. It is clear that increased risk of displacement and the consequent truncation of enjoyment of the benefits of community improvement actions could potentially lead to undervaluation of the marginal benefits of such actions. It is also clear that the communities that are affected by gentrification contain substantial numbers of residents who rent their dwellings rather than own them. It is possible, however, that the combination of property owners, of both owner- and renter-occupied property, would provide sufficient valuation of the benefits of community improvement actions to yield the efficient amount of efforts towards such actions.

If all property owners reside within the neighborhoods affected this might seem even more likely, but this is generally not the case in large cities where substantial amounts of rental housing are owned by individuals who live elsewhere or even by business entities whose owners reside around the world and may have only a vague notion of which properties their businesses actually own and operate. Nevertheless, community improvement actions do improve the quality of life in neighborhoods, and this does increase the demand for living in those areas. This increase in demand under most circumstances will be reflected in the price of properties and the rents that potential occupants are willing to pay.

This provides an incentive, even for large non-resident landlords, to contribute towards efforts to improve the local community. On the other hand, there are many good reasons to believe that absentee landlords will lack the same motivation that local owner-occupiers or local renters will feel. One reason is that the mechanisms that communities develop for mitigating the free-rider problem are more difficult to apply to absentee landlords. A resident (whether owner or renter) of the neighborhood is more easily identified and linked to specific community improvement actions than a nonresident owner. Whether the community improvement is a new cultural facility or efforts to clean up vacant lots, the organizers of such actions can work to identify those who live near or make use of the improvement and attempt to persuade them to contribute to the community improvement actions. This is difficult or impossible with absentee property owners.

If the renter-occupants of dwellings whose owners are absent have assurance of a long-term place in the community at reasonable rents, the lack of commitment of the property owners may not matter. The community improvement actions can be supported by local residents (either renters or owner-occupiers), and because of their security of tenure in the neighborhood their valuation of the benefits of such actions may approximate the true marginal social benefit. In such circumstances the efficient investment in community improvement actions may take place

despite gentrification that subsequently occurs. The gentrification may occur “organically” through gradual turnover of dwelling units, or through local additions to the housing stock.

Whether this incentive is effective in practice is an empirical question. If increasing the risk of displacement, or increasing the rate of turnover in the local housing market, has little impact on efforts towards community improvements, then gentrification may not generate the type of social cost illustrated in Figure 1 above (or the costs may be very small relative to other inefficiencies in the community).

If, on the other hand, increases in the probability of displacement are associated with significant reductions in efforts devoted to community improvement, then it will be a signal that the problem illustrated in Figure 1 may be working to impose costs on the communities through under-provision of community improvement actions. This would be a cost borne by the neighborhoods and communities affected. It is a real loss in the sense that these neighborhoods are less attractive than they would otherwise be, and the costs required to make them attractive would be less than the value of the community improvement.

Note that if this loss arises it is NOT borne exclusively by households with incomes below the poverty line. It affects all residents of the neighborhood and indeed may affect many neighborhoods that are not currently undergoing gentrification. It would be a cost borne by the entire community or neighborhood, and not only those who are actually displaced or most likely to be displaced.

Where security of tenure is limited and residents understand or believe that they might be put into a situation where they are forced to leave or find it unattractive to remain in the neighborhood because of rent increases, they will have a reduced valuation for the benefits that might be obtained from community improvement. If this reduced valuation is not compensated for by contributions from the owners of the properties where they live, it reduces the amount of community improvement and makes the neighborhoods less attractive. If this reduced valuation is not compensated for by contributions from the owners of the properties where they live, it reduces the amount of community improvement and makes the neighborhoods less attractive than they otherwise would be – in fact less attractive than they SHOULD be. This reduced attractiveness is a cost borne at the neighborhood or community level by all who live there.

How can we know if this is likely to be a problem? As noted above, observing that increasing the risk of displacement is associated with decreasing amounts of community improvement actions would be consistent with the hypothesis that social costs of the type illustrated in Figure 1 would be present in communities subject to gentrification. What data are available to us to measure the level of community improvement actions and the risk of housing market turnover? What data are available to us to correct for other factors that might also influence the observed level of community improvement actions? We turn attention to these questions in the next two sections.

3. Measuring community improvement actions

In order to test the hypothesis that increasing turnover or risk of displacement in the housing market is associated with different levels of community improvement actions, we must identify a source of data that is widely available for US communities and provides a plausible measure of such actions. Since “community improvement actions” can include everything ranging from informally organized neighborhood cleanup crews up to large community development organizations and public agencies with budgets in the millions of dollars, finding systematic and reasonably accurate measurements of these activities is likely to be a problem.

Many of these actions take place without the benefit of formal organizations or budgets. Some are undertaken by commercial enterprises working alone (the local merchant who underwrites the cost of new benches or new playground equipment for the park) or in concert (the local chamber of commerce that organizes efforts to improve conditions in an urban plaza). Many are undertaken through the efforts of the public sector through provision of public services in the form of parks and recreation, or efforts organized via local public schools. Each of these poses practical problems as an indicator of the level of such actions. Informal groups are not monitored and their efforts are infrequently reported in the press. Solo or collective efforts of commercial enterprises may be significant but again there is no formal and separate reporting of such efforts. Public agencies or schools are generally required to make public reports of their expenditures, but typically they do not break out the functions of such expenditures in a way that would permit measurement of the expenditures or per-capita expenditures devoted to community improvement.

Many community improvement actions are undertaken by not-for-profit organizations. These will include a wide range of groups including churches and other faith-related organizations, not-for-profit educational organizations (primary, secondary and post-secondary institutions), arts organizations, environmental organizations, clubs, and organizations created specifically for the purpose of neighborhood improvement and community development. These non-profit organizations are of potential interest because with the exception of churches, those organizations with annual budgets exceeding \$25,000 are required to submit reports that include total expenditures and total revenues. Data from these annual reports are public records and are available to researchers in computer-usable form beginning in 1988. The data require time for processing so that the most recent data are generally about 2-4 years prior to the current year (there is some variance because different organizations have different fiscal years for reporting and organizations are able to petition for additional time to complete their reporting obligations).

Some of these organizations pose measurement problems that are similar to those encountered with public agencies. The reported budgets are not presented in detail and such details as are available do not always permit determination of the share of expenditures that have been devoted to community improvement. An alternative approach would be to identify those not-for-profit organizations whose mission and core activities are focused on undertaking actions that will improve a specific neighborhood or community. This is the approach that is used for this study.

The Internal Revenue Service must certify any organization that applies for not-for-profit status as being appropriately dedicated to pursuing core activities that are consistent with the law that allows them to be exempt from taxation. In making this determination the IRS assigns each organization a code that places them within the National Taxonomy of Exempt Enterprises

(NTEE). These so-called NTEE codes cover activities in some detail, distinguishing over 645 distinct categories of activity ranging from “Alliances and Advocacy for the Arts, Culture and Humanities” (A01) through “Mutual and Membership Benefit Organizations for Provision of Cemeteries” (Y50). Data on the assets, expenditures and revenues, physical location and other details about the organizations have been collected from the IRS and are made available to researchers by the National Center for Charitable Statistics (NCCS). In order to improve the quality of the data they make available, researchers at the NCCS have independently checked NTEE code classifications provided by the IRS for over 300,000 different organizations, and in 2007 completed an automated classification tool that uses the organization name and descriptions of the organization’s purpose and activities to provide a suggested classification. This is then compared with the original IRS classification and other information to determine a final classification for each organization in the data made available by NCCS.

To construct a measure of the level of community improvement actions, we focus on three categories: “Community and Neighborhood Development Organizations” (S20), “Community Coalitions” (S21) and “Neighborhood & Block Associations” (S22). All of the organizations within these categories are classified as public charities by the IRS and have not-for-profit status under section 501(c)(3) of the Internal Revenue Code, which means that these organizations are exempt not only from taxation on any income or surplus revenue that might be generated, but also that contributions to these organizations may be deducted from the taxable income of the donor.

Broadly speaking, all organizations that qualify for 501(c)(3) status and are designated as “public charities” by the IRS can be thought of as engaging in the private production of public goods. The organizations with NTEE codes S20, S21 or S22 that are the focus of the analysis presented here fit this description. They are engaged in a variety of efforts, public services and activities with the specific goal of improving conditions in the communities where they work. The analysis below will use the number or activity levels of these organizations in each community as a measure of the level of community improvement actions. Table 1 below contains the official description of activities used by NCCS in determining the classification.

Table 1: Types of organizations used in analysis

NTEE Classification	Description of Activity
S20 - Community & Neighborhood Development	Organizations that focus broadly on strengthening, unifying and building the economic, cultural, educational and social services of an urban community or neighborhood. Use this code for community and neighborhood improvement organizations other than those specified below.
S21 - Community Coalitions	Organizations that are designed to increase citizen participation in local policy issues and thereby improve the overall quality of life in a particular state or community.
S22 - Neighborhood & Block Associations	Organizations whose members are residents of a particular community or neighborhood who have joined together to remedy deficiencies in existing neighborhood conditions or to enhance conditions that are currently satisfactory.

These three categories contain a very wide variety of organizations. In the year 2000 there were over 4100 organizations around the US that were in one of these three categories, and were located within the formal definitions of a Metropolitan Statistical Area (MSA) and had a budget of at least \$25000. To get some idea of the type of organizations represented in these categories, consider some specific examples.

Neighborhood Development Corporation of Des Moines

Founded in 1999, the Neighborhood Development Corporation of Des Moines, Iowa is a modest organization with activities focused on neighborhoods in Des Moines. The NDC has been working closely with the City of Des Moines with a particular focus to improve and revitalize specific neighborhoods in the city, particularly the East Grand, 6th Avenue Corridor and the Forest Avenue Corridor.



Figure 1: Forest Avenue Corridor in Des Moines, Iowa

Along these streets the NDC has purchased several properties, and is investing to repair and improve the properties to create a “friendly environment through mixed-use residential and commercial development.” The neighborhoods where NDC has been active are generally low to moderate income areas that contain structures that are usable but in need of investment. The NDC describes itself as a “... community-focused organization that revitalizes distressed neighborhoods and encourages neighborhood sustainability by offering commercial and residential options through building rehabilitation, new construction, and in-fill development.”

Neighborhood Development Center, St. Paul, Minnesota

The Neighborhood Development Center was founded in 1993 and describes itself as an organization that “... works in the low-income communities of Saint Paul, Minneapolis and surrounding suburbs ... to help emerging entrepreneurs develop successful businesses that serve their communities, and to help build stronger neighborhood economies.” They collaborate with other partners in the community to offer a 16 week entrepreneur training course in 20 different ethnic communities and neighborhoods. Since their founding they have provided training to thousands of entrepreneurs, provided financing, consulting and capacity-building for small businesses, and operated several business incubators in targeted inner-city neighborhoods.



Figure 2: Plaza Verde, an NDC incubator

Northern Berkshire Community Coalition, North Adams, Massachusetts

The Northern Berkshire Community Coalition was founded in 1999. A small organization with an annual budget of between \$400,000 and \$500,000, the coalition brings together several initiatives and groups operating in the region to provide programs to serve young people and families in the region, and broader community goals. Examples of the coalition’s programs include the Teen Writing Workshop, which provides a supportive environment for teenagers to create and share their work with guidance and facilitation from a professional creative writer. Each year ends with the publication of the student journal, *Somewhere Between*, and a public reading. The coalition also organizes monthly meetings in the community to facilitate discussions about topics as wide ranging as income inequality to under-age drinking. The coalition publishes a community resource guide to help identify resources and agencies that can provide help to those in need.



Figure 3: Northern Berkshire Community Coalition online resource guide

FCS Urban Ministries, Atlanta, Georgia

FCS (focused community strategies) Urban Ministries was founded in 1978 and operates with an annual budget of about \$1.2 million. FCS envisions its activities as “...reweaving the fabric of urban community by building upon neighborhood strength and by attracting ‘strategic neighbors’ to move in.” Growing out of the faith-based community, the organization now supports a wide variety of community projects ranging from a bike shop and coffee shop to initiatives designed to create and restore mixed-income housing in Atlanta neighborhoods. FCS organizes “Green my ‘hood” community work days that bring neighborhoods together to remove refuse, plant gardens and improve the quality and appearance of Atlanta neighborhoods.



Figure 4: Rubbish removal during “Green My Hood” community work

Each of the four organizations briefly described above is classified by the NCCS as an S20, S21 or S22 organization. The descriptions of the organizations make clear that they range from

relatively standard community development corporations, through training and business education and consulting services, provider of educational services and community resources, to organizers of neighborhood cleanup and small local enterprises. What they all have in common is a focus on mobilizing resources to improve, in one way or another, economic and social conditions in specific neighborhoods and communities within the cities where they operate. The analysis below will use the sum of expenditures by all such organizations within an urban area or, the total number of such organizations, per 1000 residents as a measure of the level of private community improvement actions within the city.

4. Data for analysis

Across the US there are some very large organizations of the types discussed in the previous section, but the majority of them are of modest size with budgets much less than \$1 million per year. The MSA or Census-defined Metropolitan Statistical Area will serve as our unit of observation for analysis. The data are aggregated across all organizations within a given MSA and the total expenditures per 1000 thousand residents and total number of organizations per 1000 residents is used as the central measure of the level of community improvement actions in each city. Just as the distribution of organization expenditure is skewed, the distribution of cities by expenditures per thousand persons is highly skewed, with most cities having modest levels of a few thousand dollars, but a few cities having very high levels. The distribution is illustrated below in Figure 5.

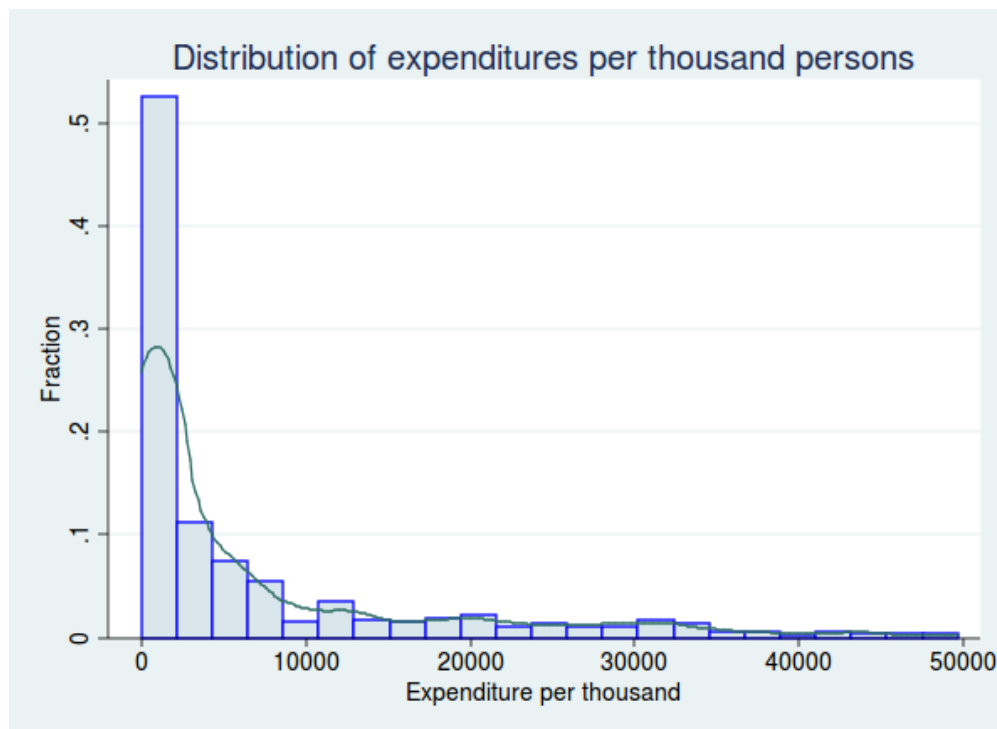


Figure 5: Distribution of MSAs by expenditures of neighborhood organizations per 1000 persons

The distribution of MSAs according to the number of neighborhood improvement organizations is also skewed, although not as much as the distribution by the expenditures per 1000 persons shown in Figure 5. Figure 6 below shows the distribution according to the number of such organizations.

The number of such organizations in an MSA averaged 6 in 1990 but increased to 15 by 2000. This is consistent with a nationwide trend of increasing numbers of not-for-profit organizations as well as increasing numbers of such organizations whose budgets come to exceed the filing threshold due to inflation and the fact that the threshold itself is not indexed for changes in the price level. The inflation adjusted expenditures per thousand residents in the MSA also increased from 1990 to 2000, growing at an inflation-adjusted annual rate of 8.25%. This compares to

average household income which grew during the same time at an inflation-adjusted annual rate of 1.14%. As with the change in the number of such organization, this growth reflects a combination of an increase in the importance of these types of not-for-profit organizations (as perceived by those willing to fund their activities) and an increasing number of organizations being required to file annual returns with the IRS because inflation has pushed their budgets above the filing threshold.

Figures 5 and 6 combine organization data from both 1990 and 2000 in a single graph, and express all expenditure levels adjusted to the price level prevailing in 2000. The data for organization numbers and expenditures are available for more recent years, but the analysis below will combine these data with Census data that are at present only available for 2000 and earlier. Hence the data focus on results for 1990 and 2000 to match available Census data.

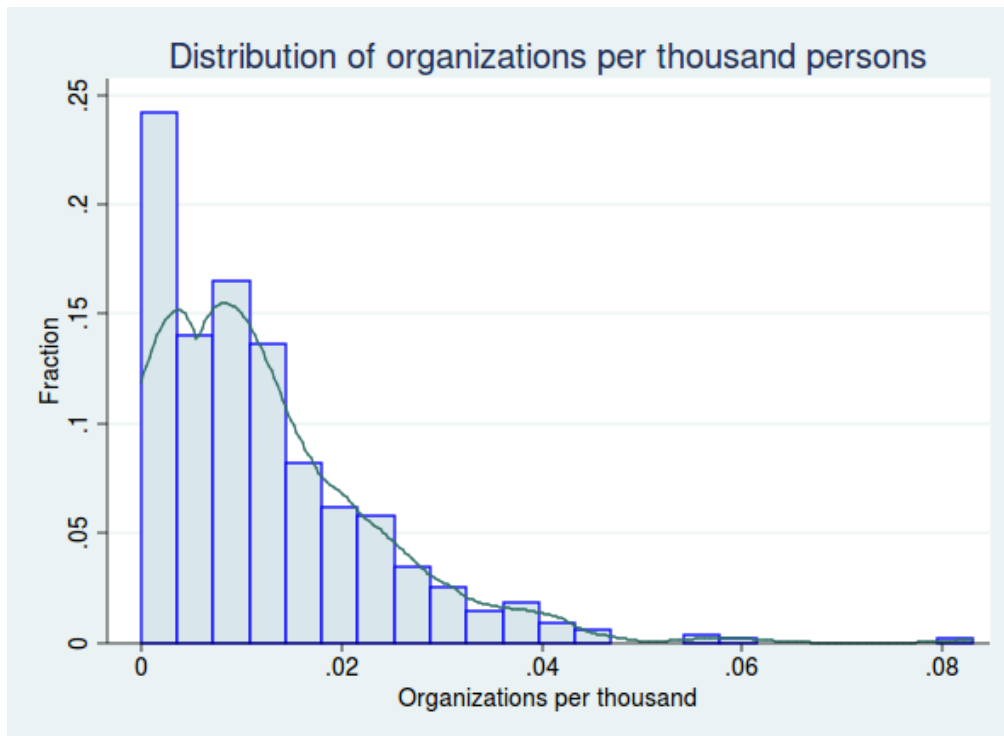


Figure 6: Distribution of MSAs by the number of neighborhood improvement organizations per 1000

The theoretical discussion in section 2 above suggested that the quantity of community improvement actions might be reduced, and the well-being of the community reduced because the risk or process of gentrification limited the attachment of residents to their neighborhoods. This happens primarily via the process of housing market turnover. It is not necessary that this turnover be involuntary. If a process of gentrification brings new residents into urban neighborhoods and for whatever reasons induces the previous residents to move elsewhere, then the previous residents may not be able to enjoy the stream of benefits from community benefit actions. It is the risk or expectation of this that results in the social cost identified.

For this to occur, the new residents attracted to the community must not simply move into housing units that are otherwise vacant. If there is surplus housing available in the neighborhood

then new residents will be able to move in without necessarily causing an existing resident to move and fail to realize the expected benefit of community improvement. Thus the social cost identified above arises only if there is displacement, but in contrast to the arguments put forward in Vigdor (2002) it is not necessary that this displacement be involuntary. What is required is that it must be in some sense anticipated.

A resident who seeks to form an expectation about the probability that he or she is likely to have only a relatively brief period of residency in the neighborhood will have several potential signals to observe. Perhaps the most readily observed is simply the amount of turnover in the local housing market. Urban areas that have ongoing processes of gentrification will have higher proportions of dwellings occupied by persons who have moved to those dwellings recently. Perhaps to distinguish gentrification from a general process of growth of the metropolitan area, the resident might consider the share of dwellings that are occupied by someone who has recently moved from somewhere else in the same MSA. Fortunately, both measures are available to us as part of the Census data. Figure 7 below shows the distribution of MSAs by the rate of housing market turnover. Figure 8 shows the distribution by rates of “local” moves.



Figure 7: Distribution of MSAs by proportion of population moved

We use both the share of population that have moved from any other location within the past 5 years and the share who have moved “locally” – that is moved from another location within the same MSA – within the past 5 years. The hypothesis we wish to examine is whether the level of housing market turnover appears to have a statistically significant negative relationship with the level of community benefit actions.

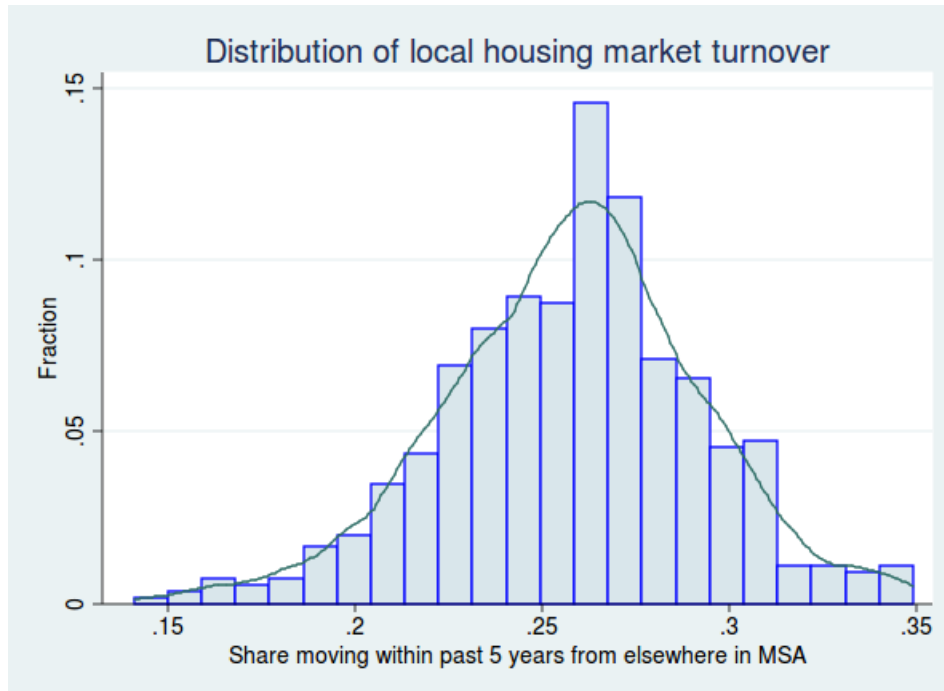


Figure 8: Distribution of MSAs by proportion of “local” movers

Of course the level of community benefit actions are also affected by other factors. They may be affected by the level of need in the community, and also by the level of income and other resources available to deal with these needs. Finally, as discussed in section 2 above, they may be affected by the nature of housing tenure in the city, with higher rates of renter-occupation putting more households at risk of displacement. Because the displacement can be as much of a problem even if the departures are voluntary, it is not clear *a priori* how much of an impact we should expect renter-occupation to have.

To take into account these additional factors, we controlled for the poverty rate (to reflect the level of need), the average household income (to reflect the available resources), and the share of the housing stock that is renter-occupied. We obtained these data for 1990 and 2000 using Census figures for each MSA, and matched them with the expenditure and number of organizations data. As mentioned above, all dollar values were adjusted to 2000 price levels.

Table 2: Descriptive statistics for variables for entire sample

Variable		Mean	Std. Dev.	Min	Max	Obs
Expenditures thousand	per	9209	17423	0	132852	550
Organizations thousand	per	0.012	0.011	0	0.083	550
Share moved		0.480	0.072	0.273	0.704	550
Share moved locally		0.258	0.034	0.141	0.349	550
Ave household income		48277	7539	31919	83525	550
Share renters		0.309	0.059	0.131	0.521	550
Poverty rate		0.135	0.048	0.052	0.419	550
Number of organizations		10	31	0	457	550

Table 3: Descriptive statistics for variables in 1990

Variable		Mean	Std. Dev.	Min	Max	Obs
Expenditures thousand	per	5612	12802	0	97150	275
Organizations thousand	per	0.006	0.006	0.000	0.035	275
Pct moved		0.487	0.077	0.273	0.704	275
Pct moved locally		0.260	0.034	0.155	0.344	275
Ave household income		45527	6729	31919	69707	275
Pct renters		0.317	0.059	0.153	0.521	275
Poverty rate		0.140	0.051	0.063	0.419	275
Number of organizations		6	17	0	219	275

Table 4: Descriptive statistics for in 2000

Variable		Mean	Std. Dev.	Min	Max	Obs
Expenditures thousand	per	12807	20454	0	132852	275
Organizations thousand	per	0.018	0.012	0.000	0.083	275
Pct moved		0.474	0.066	0.286	0.679	275
Pct moved locally		0.256	0.034	0.141	0.349	275
Ave household income		51027	7309	35591	83525	275
Pct renters		0.302	0.058	0.131	0.509	275
Poverty rate		0.129	0.044	0.052	0.359	275
Number of organizations		15	40	0	457	275

Tables 2, 3 and 4 above present descriptive statistics for each of these variables for the entire sample, for 1990 and for 2000 respectively. It is worth looking at these values – at least for the entire sample – to form a sense of what might constitute a “large” change in values of the variable.

One convention is to regard a one standard deviation as a reasonably important change, and a two standard deviation change as large. By these terms a large change in the rate of neighborhood stability would be to move from the sample mean value of 0.48 to a rate below 0.33 or above 0.62. Both of these values are within the range of observed values in the sample. A large change in the rate of neighborhood stability would be a 30% increase or decrease in the rate of recent movers. For local movers, a 27% increase or decrease would be a large change. For the outcome of expenditures or numbers of organizations per 1000 persons, a large increase would be a 378% increase in expenditures or a 184% increase in numbers of organizations. A large decrease would be a decline to zero. Once again both ranges are within the range of observed data for US cities.

We now turn attention to estimating the relationships.

5. Estimated impact

To test the hypothesis that displacement risk could be associated with significant reduction in community improvement actions, we estimate four different models that consider the two possible measures of the level of community benefit actions (expenditures per thousand and number of organizations per thousand) and the two possible measures of displacement risk (percent of the population above age 5 who have moved within the past 5 years, and the percent who have moved within the past 5 years from another location within the MSA). To facilitate comparisons between the estimates, we estimate the relationships in “elasticity” form:

$$\ln(\text{expenditures}) = \beta_0 + \beta_1 \ln(\text{PctMoved}) + \beta_2 \ln(\text{AveHHInc}) + \beta_3 \ln(\text{PctRenters}) + \beta_4 \ln(\text{Poverty})$$

or

$$\ln(\text{organizations}) = \beta_0 + \beta_1 \ln(\text{PctMoved}) + \beta_2 \ln(\text{AveHHInc}) + \beta_3 \ln(\text{PctRenters}) + \beta_4 \ln(\text{Poverty})$$

By estimating a relationship that is linear in the logarithm of the variables, the parameter estimates can be interpreted as elasticities – meaning the percentage change in the expenditures or numbers of organizations generated by a one percent change in the variable of interest. Thus the estimate of β_1 will provide an estimate of the percentage impact of a one percent change in the measure of neighborhood stability. Table 5 presents the estimates, with the column header indicating which measure of community benefit actions is being used and the rows associated with the explanatory variables. Standard errors of the parameter estimates are in parentheses below the parameter estimates themselves, and the number of asterisks indicates a level of statistical significance, with *** signifying that the estimate is significantly different from zero at the 1% level, ** indicating the 5% level, and * indicating the 10% level. In every case the standard errors of the estimates have been clustered by MSA and calculated to be robust to heteroscedasticity and model specification errors.

Table 5: Estimates of the relationship between displacement risk and community benefit actions

	Expenditures per thousand		Organizations per thousand		Expenditures per thousand		Organizations per thousand	
Share moved (β_1)	-2.4201	***	-1.1696	***				
	(0.739)		(0.283)					
Share local move (β_1)					-1.9585	***	-0.6326	**
					(0.635)		(0.255)	
Ave household income (β_2)	1.4573	*	0.9093	***	1.2679	*	0.7469	***
	(0.871)		(0.271)		(0.764)		(0.283)	
Share renters (β_3)	1.0209	*	0.1536		0.4279		-0.1674	
	(0.606)		(0.227)		(0.560)		(0.217)	
Poverty rate (β_4)	-0.5413		-0.1882		-0.4598		-0.1778	
	(0.469)		(0.165)		(0.438)		(0.162)	
Constant (β_0)	-9.2947		-15.3670	***	-8.6347		-13.9575	***
	(9.121)		(2.801)		(7.976)		(2.993)	
Observations	450		453		450		453	
F	5.82	***	11.61	***	5.41	***	6.99	***
R ²	0.0652		0.0914		0.0567		0.0635	

How should we interpret the analysis reported in Table 5? The results confirm the view of gentrification displacement presented in section 2 above. The estimates show that in cities with a higher share of population who have moved within the last 5 years, there are significantly fewer community and neighborhood improvement organizations per capita, and the organizations that are present have collectively lower expenditures per capita. This is true after adjusting for differences between cities in the level of affluence and ability to pay (as measured by the average household income), the structure of the local housing market (as measured by the share renters) and the level of local need (as measured by the poverty rate).

The same result holds true if we focus exclusively on the share of population that has moved locally (within the urban area). Increasing population displacement is associated with fewer community improvement organizations per capita and smaller combined per-capita expenditures for those organizations. There are only two variables that are statistically significant in every specification of the model: average household income and the measures for risk of displacement. The F tests of joint significance for each model are all significant. The impact of average household income and risk of displacement (housing market turnover) are exactly the signs that we expect. In each model an increase in the risk of displacement is associated with a statistically significant decline in the measure of community benefit actions. While analysis with limited data of this sort cannot prove a causal connection, the results are consistent with the hypothesis advanced above. When gentrification is associated with an increased risk of displacement, it is also associated with reduced levels of community benefit actions and this imposes a social cost on the affected neighborhoods and communities. This result underscores our central point: it is not the gentrification alone that is the source of the problem, but rather the instability and risk of displacement associated with gentrification. This displacement may or may not reduce the well-being of those who are displaced. The more serious and relevant point is that the displacement is

associated with reduced efforts towards improving the communities and making them better places to live.

The estimated impacts are statistically significant. Are these impacts quantitatively important? We noted above that a large increase in displacement risk would be something on the order of a 30% increase in the share of population being recent movers, or a 27% increase in the share of population who had undertaken a move within the MSA during the past 5 years. How much of an impact on community improvement actions would be associated with such increased risk of displacement? The estimates in Table 5 suggest that **a large (two standard deviation) increase in displacement risk would be associated with a 52% to 72% decrease in community benefit expenditures per capita, or a 17% to 35% decrease in the numbers of organizations in the MSA.** For communities that are struggling these could be important.

6. Conclusion

In the introduction to this paper, we advanced the hypothesis that gentrification is more interestingly considered as a problem for the neighborhoods and communities that are potentially subject to gentrification, rather than the individual poor households that reside in or might move away from areas subject to gentrification. The risk of displacement from gentrification was capable of changing the incentives that residents have to engage in any of the variety of activities that can improve a community. The risk of displacement that is characteristic of gentrification imposes a social cost on the neighborhood. This cost is borne by the community as a whole and not by only those persons who are poor or those who are displaced.

In section 2 we presented a theoretical argument to make clear how this social cost might arise. If significant numbers of residents are renters and/or the benefits of community improvement actions are not fully capitalized into property values (or are ignored by absentee landlords) then community improvement actions will be under-provided to the neighborhood. Increasing the risk of gentrification displacement exacerbates this problem and increases the welfare loss borne by the neighborhood.

In section 3 we identified an approach to measure or proxy the level of community improvement actions taking place in communities by measuring the number and activities of a certain subset of not-for-profit organizations. In section 4 we identified other Census data that can be combined with this information to permit an estimate of the extent to which displacement (as proxied by housing market turnover) is associated with reduced community improvement actions.

In section 5 we presented these estimates and found evidence that was consistent with the truth of the original hypothesis presented. What can we say about the consequences and policy implications? As noted above, a large (two standard deviation) increase in housing market turnover (displacement) is associated with a 52-72 percent decline in community improvement expenditures in affected communities. This means fewer programs for neighborhood children, fewer neighborhood cleanup programs, and fewer training opportunities for new businesses. These reductions are felt in the neighborhood by all of the residents. Persons who are displaced and leave might easily manage to move to more stable communities that are less subject to under-provision of these beneficial actions.

How can policy address these problems? There are a variety of ideas that might be applied. Increasing assistance for provision of community improvement actions might help, as might programs designed to increase the probability that residents can remain in the community if they desire. This would include policies to ensure provision of affordable housing and limit involuntary displacement. Such policies could help transform rapid gentrification into a more natural (and unavoidable) process of urban change.

Hopefully these findings can also improve our general understanding of how cities function and how urban political processes work. One economist charged with discussing Vigdor (2002), after the paper was presented began his remarks with “I have always been skeptical of gentrification’s critics. The way some of them carry on” This type of sentiment and reaction to the critics of gentrification is not atypical – but it seems a shame to stop with the skepticism rather than continue on to ask why so many are critical and why they sometimes succeed in blocking development seen as contributing to gentrification? In the context of the arguments advanced and

supported above we can view the critics as endeavoring to make a claim to remain in their neighborhoods and reap the benefits of the community improvement actions they have worked hard to provide. In this sense such claims are seen to be less of an annoying mystery, and more a source of economic efficiency.

7. References

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