The Case for Intervention in Middle Neighborhoods

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or several decades, America has been acting out a national drama that might be called "A Tale of Two (Types of) Cities." One archetypical city is growing in population, employment, and real income per capita; it has successfully managed a transition to the postindustrial economy and has tight housing markets. The other archetypical city is struggling to find its place in the twenty-first century economy, and its housing markets are considerably weaker on balance. It is the latter type that is the focus of this essay, what have recently been termed "legacy cities (American Assembly, 2011)."

Within legacy cities' neighborhoods we see the same drama played out at a smaller scale. On the one hand, some neighborhoods offer high-quality residential life in all dimensions. Some of these neighborhoods have traditionally been strong and attractive, others have recently been constructed, and still other older neighborhoods have blossomed with renovations of their housing, revitalized retail sectors, and an influx of well-educated households. On the other hand, some neighborhoods continue to decay, empty out, and be inhabited by impoverished people who increasingly experience an erosion in public safety and quality of public and private services and facilities. Both of these extremes have been analyzed by those studying gentrification (e.g., Hyra 2018; Freeman 2011) and the concentration of poverty (e.g., Wilson, 1987; Jargowski, 2014).

There is a third type of neighborhood in legacy cities as well—a "middle neighborhood," which is situated between the two extremes above. Compared with places that are gentrifying or concentrating disadvantage, middle neighborhoods have been largely ignored by urban scholars and planners (for an exception, see Mallach, 2008). This oversight must be rectified because middle neighborhoods play a vital role in the overall health of a city and, I will argue, in the well-being of its poorest citizens, even if they do not live in them.

My goal in this essay is to establish a rationale for why scholars and policymakers should seriously consider middle neighborhoods as a locus of potential policy innovation and intervention. I first provide an overview of the theory of metropolitan housing submarkets, which provides the foundation for understanding neighborhood dynamics. Within this framework I explain downward "filtering," the primary dynamic hurting neighborhoods in legacy cities. Second, I explain how the filtering process often involves complex adjustments in lower-quality neighborhoods. Third, I explain the various inefficiencies and inequities associated with filtering. It is the tempering of the negative consequences of filtering that provides the core justification of interventions aimed at stabilizing middle neighborhoods. Finally, I discuss the equity and efficiency aspects of such potential interventions in middle neighborhoods.

The Drivers of Neighborhood Change and Filtering

Neighborhoods change is based on the decisions by property owners and prospective and current residents. These decisions will influence the ongoing flow of resources—money, people, time, and social and political capital—to a neighborhood that over time will influence its myriad characteristics (Galster, 1987, ch 4; Grigsby et al, 1987; Temkin and Rohe, 1996; Galster 2001). These decisions are based on uncertain expectations about what will occur both in the neighborhood in question and in others with which this neighborhood competes.

As foundation, I draw on the model of the metropolitan housing market developed by Rothenberg, Galster, Butler, and Pitkin (1991). This model begins by classifying the housing stock into "quality submarkets," or sets of homes and apartments that households perceive as closely substitutable, considering all the myriad attributes of the housing bundle, including place-based attributes associated with its neighborhood such as public services, natural endowments, environmental quality, etc. Each submarket has its own supply and demand characteristics and relationship to other submarkets. Supply into one submarket (through new construction and net conversion of existing dwellings) will be influenced, among other things, by the relative rate of return that owners and developers can reap in this submarket compared with others. Demand by households in one submarket will be influenced, among other things, by the market valuations (sales prices or equivalent capitalized rents) in closesubstitute submarkets that are competing for these households. Changes in the rents or sales prices in any one submarket are transmitted sequentially to other submarkets by housing owners and developers altering their supply decisions in response to a new submarket pattern of rates of return, and by households altering their occupancy decisions in response to new relative market valuations across substitute submarkets from which they can choose.

This model of housing dynamics can be useful in understanding neighborhood dynamics (Rothenberg et al., 1991: ch. 9). The connection between metropolitan housing submarkets and neighborhood is straightforward. Most neighborhoods in the market-based systems consist primarily of residences classified (by households, owners, and developers) as close substitutes in the same quality submarket. This is so for three reasons (Vandell, 1995). First, economies of scale in construction lead private developers to build homes in a subdivision that typically have similar physical characteristics. Second, developers often find it most profitable to build homogeneously high-quality subdivisions because many well-off households are willing to pay a premium for neighbors of high socioeconomic status. Third, because spatially based attributes contribute to a dwelling's quality and, hence, submarket designation, dwellings in close proximity will share many common attributes and thus tend to be classified in the same quality submarket tautologically.

Any forces affecting a particular housing submarket will also affect the neighborhoods where such a dwelling is located; the greater the representation of the given housing submarket type in a neighborhood, the greater the spatial impact there. In addition, it suggests that forces originally having an impact anywhere (either in terms of quality submarket or geographic location) in the metropolitan area will eventually have some impact everywhere, as the shock

is transmitted (in progressively weaker magnitudes) across submarkets of increasingly dissimilar substitutability.

A classic illustration of these neighborhood dynamics is the process of filtering (Galster and Rothenberg, 1991). Filtering is a situation in which the market valuations (sales prices and rents) of a submarket are systematically lowered, permitting some households to gain occupancy who previously were unwilling or unable to occupy this submarket for financial reasons. Moreover, some residential property owners in such deflated submarkets choose to convert their dwellings to a lower quality submarket designation. Filtering thus has defining elements of change on both demand (household) and supply (property owner).

Filtering is typically triggered in a region containing a legacy central city as follows. Developers may speculate and build a number of high-quality submarket homes on exurban, undeveloped tracts on the metropolitan fringe. Should this increase in overall housing supply exceed the increase in demand for the high-quality submarket (say, owing to smaller growth of high-income households) in aggregate, there will be a net decline in the market valuations and rate of return associated with such dwellings. Some households who previously chose not to occupy the high-quality submarket now do so, as prices have fallen and become affordable. Concurrently, some owners of pre-existing dwellings in the high-quality submarket may now choose to downgrade the quality of their units to take advantage of comparatively superior rates of return in the somewhat lesser quality submarkets. They typically accomplish this by passive under-maintenance: investing insufficient upkeep to maintain the dwelling in its original submarket.

These dual adjustments jointly restore equilibrium in the high-quality submarket but sequentially upset it in the next-lower-quality one(s). There, demand has fallen (from some erstwhile occupants choosing a superior quality submarket) and supply has risen (from some owners downgrading from higher-quality submarkets into the given submarket). Both adjustments on demand and supply drive down market valuations. As a result, adjustment processes to both supply and demand ensue analogous to the above, but in the process they generate forces that are transmitted still farther down the submarket quality array.

By the time systemwide equilibrium is restored, there have been a series of changes in demographic and physical attributes of neighborhoods constituting submarkets. In every submarket, the least competitive neighborhoods have witnessed: (1) an influx of households of somewhat lower financial means than the typical residents who left (often manifested as a switch from owner-occupants to renters), and (2) a decline in the physical quality of the dwellings, particularly in lower-quality submarkets. In the extreme, they experience dilapidation and even abandonment. The metropolitan aggregate new construction of high-quality dwellings in excess of household demand rendered the array of lower-quality neighborhoods relatively less attractive and less expensive. This generated altered flows of resources (occupancy patterns by households, financial resources by owners) that ultimately changed absolutely the attributes of these neighborhoods in ways that eroded the quality of life of residents and the financial returns of property owners there.

The Complex Nature of Neighborhood Filtering

Once begun in a neighborhood, the filtering process at some point is likely to cross a threshold: a critical point past which change accelerates. As explained in the next sections below, the nature of filtering holds at least two crucial practical implications. First, it suggests that the filtering process will lead to large social inefficiencies. Second, it suggests that scarce public resources may be applied most effectively before filtering is allowed to runs its course.

There are four distinct, not mutually exclusive, mechanisms through which thresholds may be produced: collective socialization, contagion, gaming, and preference models. The first two rely on collective actions and social interaction to create thresholds; the other two involve more individual attitudes and behaviors. One can analyze behavior of households to move out of the declining neighborhood through collective socialization, gaming, and preference models; behavior of households who move in to such neighborhoods through gaming models; and behavior of households, dwelling owners, and business people who remain in the neighborhood through collective socialization, gaming, and contagion models.

Collective socialization theories focus on the role that social groups exert on shaping an individual's attitudes, values, and behaviors (e.g., Simmel 1971, Weber 1978). Such an effect can occur to the degree that: (1) the individual comes in social contact with the group, and (2) the group can exert more powerful threats or inducement to conform to its positions than competing groups. Given the importance of interpersonal contact in enforcing conformity, if the individuals constituting a group were scattered randomly over urban space, they would be less able either to convey their positions effectively to others with whom they might come in contact or exert much pressure to conform. It is only when a group reaches a certain critical mass of density or power over a predefined area that it is likely to become effective in shaping the behaviors of others. Past this threshold, as more members join the group, the group's power to sanction nonconformists grows. This growth in power is particularly dramatic when the position of the group becomes so dominant as to become normative in the area.² The reverse is also true: what previously constituted civil behaviors in a neighborhood, enforced by collective norms, may rapidly erode as the previously dominant group moves out, eventually falling below its threshold of normative dominance, and is replaced by those who do not share the erstwhile norms.

The basic tenet of contagion models is that if decision-makers live in a community where some of their neighbors exhibit non-normative behaviors, they will be more likely to adopt these behaviors themselves. In this form of "social learning," neighborhood problems are

¹ For a review, see Galster (2014); for evidence, see Galster, Quercia, and Cortes (2000).

² More modern sociological treatises closely related to collective socialization also suggest thresholds, such as Wilson's (1987) contention that as a critical mass of middle-class families leave the inner city, low-income blacks left behind become isolated from the positive role models that the erstwhile dominant class offered. Economists also have developed several mathematical treatises involving collective socialization effects in which thresholds often emerge as solutions to complex decision problems under certain assumptions (Akerlof, 1980; Galster, 1987: ch. 3; Brock and Durlauf, 2000).

believed to be contagious, spread through peer influence. Crane (1991) proposes a formal contagion model to explain the incidence and spread of social problems within a neighborhood. The key implication of his contagion model is that there may be critical levels of social problems in neighborhoods. He states that if "the incidence of problems stays below a critical point, the frequency or prevalence of the problem tends to gravitate toward some relatively low-level equilibrium. But if the incidence surpasses a critical point, the process will spread explosively. In other words, an epidemic may occur, raising the incidence to an equilibrium at a much higher level" (p. 1227). From our perspective, we would observe attributes such as crime and social incivilities rise disproportionately in a neighborhood undergoing filtering when it reaches a point where concentrations of disadvantaged populations exceed a threshold. Several empirical studies suggest that this threshold is in the range of 15-20 percent poverty rates in a census tract (Galster, 2002; Galster, Cutsinger and Malega, 2008).

Gaming models assume that, in many decisions involving neighborhoods, the costs and benefits of alternative courses of action are uncertain, depending on how many other actors choose various alternatives. The individual's expected payoff of an alternative varies, however, depending on the number or proportion of neighbors who make a decision before the given actor does. Thus, the concept of a threshold amount of observed prior action is central in this type of model. The well-known prisoners' dilemma is the simplest form of gaming model (Schelling 1978), but more sophisticated variants have been developed and applied to neighborhood change (Granovetter, 1978; Granovetter and Soong, 1986). As illustration, consider the situation of potential filtering of a neighborhood but the potential losses in property values might be forestalled were all its owners to improve their properties as a group. However, individual owners may believe that they will not earn back the value of their investment if they were to reinvest when no others followed suit. A conservative gaming strategy of behaving to minimize prospective loss, regardless of what others may do, will lead many owners to refrain from reinvesting first. Only if a threshold proportion of owners were to reinvest would these skeptics be convinced to follow suit (Taub, Taylor, and Dunham, 1984).

Preference models claim that actors in a residential environment will respond if the aggregate behavior of others (or, an outside event) raises an undesirable neighborhood attribute above the level they find tolerable. A process internal to the neighborhood can be triggered once the attribute reaches the critical threshold. The trigger occurs because actors in a neighborhood are assumed to have different tolerance levels, with the least tolerant responding first. If an additional change in the neighborhood attribute results from the course of action taken in response to the initial event by those with the lowest tolerance level, the new level of the neighborhood attribute may now be above the tolerance level of some of the less tolerant remaining actors. The process may continue with new rounds of attribute change and actor adjustment until the process is completed. At the extreme, the process may end when all the original actors in a neighborhood have responded. The theoretical development of preference models has focused on changes in a neighborhood's racial composition from white

to non-white occupancy, though extensions to preferences for other sorts of neighborhood attributes are straightforward. For example, if some "undesirable" household type were to move into a neighborhood as part of the filtering process, the original residents least tolerant of the new residents may leave. If more members of the undesirable group filled their vacant dwellings disproportionately, still more of the original residents may find the now-higher proportion of undesirables intolerable, and move out. And so it continues. Seminal theoretical work in this vein has been produced by Schelling (1971; 1978), Schnare and MacRae (1975), and Taub, Taylor and Dunham (1984).

Neighborhood Filtering Processes Are Socially Inefficient

The discussion so far implies that changes in the altered flows of resources into neighborhoods as they filter are not likely to produce socially efficient outcomes. By "socially efficient" I mean outcomes that provide the greatest aggregate well-being to society as a whole by getting the most out of our finite human, natural, and financial resources. At least four reasons make filtering socially inefficient: externalities, gaming, expectations, and flawed pricing of attributes owing to information asymmetries.

Because the act of one property owner toward dwelling maintenance may change the neighborhood's aggregate upkeep profile and quality of life, because the act of one household to move into or out of neighborhood may marginally change its aggregate population attributes, and because all such changes affect the decision-making of other current and prospective residents and property owners in that place, the individual's act can be thought of as generating externalities. Externalities are indirect costs or benefits imposed on others by an individual's action. For example, the choice of a property owner in a filtering neighborhood to allow the façade of the home to fall into disrepair generates external costs to neighbors. The choice of an owner to abandon the property represents an even more severe example of a negative externality generator. When a low-income household moves into a neighborhood already at its threshold of concentrated disadvantage, it imposes negative externalities on those living there via the upsurge in induced negative social behaviors, as explained above. Because in all such cases, external costs do not accrue to the decision-maker, a suboptimal amount of the activity is chosen in aggregate: the classic economic inefficiency. That is, filtering is a process that produces too much dwelling decay and abandonment and too much concentrated disadvantage compared with what would be best for society as a whole.

The earlier reference to gaming also serves as reference here. Individual neighborhood households and property owners lack certainty about the decisions of a myriad other households and owners in the neighborhood or who are considering investing in the neighborhood. Yet, the payoffs from their alternative choices depend on such decisions of others. Thus, autonomous decision-makers are likely to adopt strategies that do not produce the greatest good for the collective. The unwillingness to maintain buildings adequately in an area until other investors do so first is a classic example of a gaming-induced social inefficiency.

Expectations are, of course, imperfect and prone to major errors. But this in itself does not imply a systematic bias toward inefficient choices. Rather, expectations about the future may prove to be so "certain" in the view of the decision-maker that the resulting choice encourages the expectation to transpire. This is the famous "self-fulfilling prophecy." An illustration is panic selling of homes often associated with filtering. Because of some anticipated negative neighborhood change, several homeowners become convinced that property values will fall rapidly. They therefore try to sell their homes quickly at a discount. The rash of "For Sale" signs and the rumors that these homes are selling cheaply convince other owners in the neighborhood that, indeed, neighborhood quality and property values are on the way down. As they too try to unload their properties, panic ensues and prices do, as some prophesied, drop precipitously. The sorts of prices produced by these self-fulfilling prophecies are unlikely to allocate resources efficiently. Instead of accurately capitalizing the underlying quality (and replacement cost of the dwellings) in the neighborhood, these artificially deflated prices encourage owners with less personal financial means to purchase property. These owners are likely to invest less in home maintenance and repair than their higher-income forebears (Galster, 1987), thereby shortening the useful lifetimes of these valuable assets and inefficiently encouraging more filtering.

Finally, certain attributes of a particular neighborhood, especially those associated with the sentimental and social-interactive dimensions, cannot be evaluated well by potential residents or property buyers who are not yet located there compared with those who have lived there for some time. For example, one can only guess how attached one might become to prospective neighbors and neighborhood before having the experience of living there. This divergence in information can also lead to inefficient transactions. As illustration, consider a viable neighborhood that enjoys strong social capital among its residents and owners. Unfortunately, such valuable social interchanges will be difficult for the market to understand and value, dependent as this social capital is on the idiosyncrasies of personal interrelationships that have been built among current residents. The sales prices and rents of this neighborhood are thus too low; they do not reflect fully the quality of life. This means that many prospective buyers with less financial means will make inefficient choices: they will be more willing and able to buy or move into this neighborhood than if it had been fully evaluated by the market. Thus, there is excessive filtering from the perspective of social efficiency.

Neighborhood Filtering Processes Are Socially Inequitable

Analogous to the efficiency analysis is equity. By "equity" I mean that those who are most disadvantaged generally, especially low-income households and those of color, should reap disproportionately greater benefits from any process or policy or suffer disproportionately smaller costs from such.

I believe it reasonable to hypothesize that neighborhood filtering processes disproportionately impose personal and financial costs on lower-income households and property

owners in lower-quality neighborhoods. Theory suggests, for example, that the filtering process in declining metro areas ultimately produces residential abandonment, the financial and quality of life externalities associated with which undoubtedly primarily affect the low income households and those of color. The well-documented problems associated with concentrated poverty neighborhoods (Wilson, 1987; Friedrichs, Galster and Musterd, 2005) are similarly suggestive that the distress produced when neighborhoods surpass multiple physical, financial, and sociological thresholds are borne disproportionately by disadvantaged households.

Several recent studies have found that home appreciation rates vary by low-income and high-income market segments and by race in ways that support this assertion about inequities. Flippen (2004) found dramatic geographic differences in home appreciation rates across neighborhoods delineated by racial-ethnic composition. From 1970 to 1990, U.S. census data showed that homes in neighborhoods with less than 2 percent black residents appreciated by more than 22 percent, whereas those in neighborhoods with 2 percent to 30 percent black residents appreciated 10 percent, and those with more than 30 percent black residents appreciated less than 8 percent, on average.³ Among loans to low-income borrowers originated between 1998 and 2002, blacks experienced 10 percent lower annual equity appreciation than whites (Stegman, Quercia, and Davis, 2007). Even larger black-white gaps were apparent in home appreciation rates for low-income buyers graduating from a Denver public housing-run asset-building/counseling program; Hispanics evinced even lower appreciation rates than blacks (Santiago, Galster, and Kaiser, 2008).

Beyond the direct negative impacts of filtering on low-income residents and property owners of lower-quality neighborhoods, negative indirect impacts ensue through fiscal consequences for the political jurisdictions encompassing such neighborhoods. Filtering means that higher-income residents are eventually supplanted by somewhat lower-income residents, in the extreme producing concentrations of poverty. This process reduces the aggregate local income tax revenues that the jurisdiction can collect. Associated reductions in geographic density of disposable income will reduce the aggregate sales of local retailers serving these neighborhoods, thereby lowering the sales tax revenues that the jurisdiction can collect. Declines in local residential and retail establishment property values will erode the property tax revenues that the jurisdiction can collect. Thus, if filtering becomes a dominant dynamic in a jurisdiction, it will seriously degrade its various tax bases, forcing it into the unenviable dilemma of either reducing the quality and quantity of public services or raising the rates or expanding the types of taxation. The burdens of both options fall most heavily on the lower-income residents of the jurisdiction.

Some might argue that filtering actually benefits lower-income renter households who

³ During the same period, the patterns were less monotonic for Hispanic composition, however. Homes in neighborhoods with less than 2 percent Hispanic residents appreciated more than 14 percent, those with 2-5 percent Hispanic residents appreciated 27 percent, those with 5-10 percent appreciated 23 percent, and those with more than 10 percent appreciated 15 percent.

are willing and able to occupy somewhat better quality dwellings than they would otherwise because filtering lowers rents. Though there is some merit in this argument, the number of such "winners" in the filtering process and the degree of their benefit are subject to a number of critical parameters related to the structure of submarkets in the given metropolitan area. More fundamentally, the supposed benefit of getting better housing quality for the money is ephemeral in legacy cities, especially for the poorest of renters. If there is an inadequate flow of net rental income (in combination with property appreciation) to justify continued investment in maintenance and repairs required to keep the dwelling at its current quality, over time its condition will erode. Moreover, as this process spreads across the affected neighborhood, it degrades the quality of the larger residential environment for all residents. This degradation becomes most extreme when filtering leads to abandonment of some structures. Indeed, the surviving housing may be "cheap," but this reflects the lack of residential and neighborhood quality that is being capitalized.

Rationale for Intervention in Middle Neighborhoods

Thus far I have established that filtering imposes large costs on legacy cities that are disproportionately borne by its most vulnerable citizens. It hastens the flight of a neighborhood's better-off residents and the deterioration and eventual abandonment of its residential and non-residential properties. If it becomes widespread, filtering erodes the jurisdiction's tax base and its ability to supply a range of good-quality public services. Filtering as a dominant dynamic in legacy cities must be thwarted. This, in essence, is the rationale for intervening in middle neighborhoods.

I propose that interventions designed to stem filtering-induced decline should be targeted to middle neighborhoods. Even though these places are not where the most vulnerable citizens live nor where the evils of filtering wreak the most havoc of blight and abandonment, they are the places where interventions may plausibly head off these worst-case situations in the future. Local ggovernments should target financial incentives, regulations, and investments of infrastructure and public services to neighborhoods at crucial threshold points of decline. In concert, these actions could help alter perceptions of key neighborhood investors, provide compensatory resource flows, minimize destructive gaming behaviors, internalize externalities, and moderate expectations, thereby defusing self-fulfilling prophecies. ⁵

Consider two hypothetical scenarios of neighborhood dynamics (Figure 1). The horizontal axes in Figure 1 portray time passing as a neighborhood transitions from stability to the point of decline spawned by filtering. The vertical axes portray the dollar amounts of private and public resurces flowing into the neighborhoods as investments in the residential and nonresidential properties and in the public infrastructure. I propose an aggressive

⁴ These issue are too technical for this essay, but see Galster and Rothenberg (1991).

⁵ It is beyond the scope of this essay to delve into the particulars of what form this intervention might take. For an evaluation of alternative strategies, see Galster (1987).

strategy of intervention at the stage of neighborhood incipient decline, when the filtering forces have just started to induce property owners to withhold some of their erstwhile investments (shown as the declining solid line in Figure 1 Scenario A). It is at this point when only a modest amount of public investment (shown as the increasing dashed line in Figure 1 Scenario A) would be required to boster the confidence of private investors and convince them to reassess their investment strategies. Once the private flows of investments have been reestablished, the public sector can once again withdraw until filtering threatens again. This could be termed a "catch it before it falls too far" strategy.

Scenario A: "Catch It Before It Falls Too Far"

Investment S in Neighborhood

KEY: Private Investment Public Investment

Public Investment

Stability Incipient

Scenario B: "Pick It Up After It Has Fallen"

Investment S in Neighborhood

KEY: Private Investment

Stability Incipient

Stability Incipient

Figure 1: Alternative Scenarios for Public Interventions into the Filtering Process

Compare the proposed strategy in Scenario A to that in Scenario B often pursued today in legacy cities. Such might be termed a "pick it up after it has fallen" approach. Scenario B represents a strategy of trying to revitalize a neighborhood after filtering has run its course and the place is littered with blighted and abandoned structures and perhaps vacant lots where now-demolished structures once stood. These are areas that have suffered massive private disinvestment (shown by the steeply falling solid line in Figure 1 Scenario B). Such neighborhoods clearly require massive infusions of public monies (shown by the steeply rising dashed line in Figure 1 Scenario B) to trigger any complementary response by the private sector. Compared to B, Scenario A suggests a more efficient, better-leveraged use of public resources available for neighborhood reinvestment, which in the typical legacy city

are all-too scarce. By preserving the place of middle neighborhoods in the metropolitan quality hierarchy, my proposed strategy would forestall (and hopefully, avoid entirely) their slideinto low-quality neighborhoods. This, in turn, would forestall the destruction and abandonment of current low-quality-but-viable neighborhoods and all the pernicious efficiency and equity problems noted above.

Summary and Conclusion

The stock of attributes composing neighborhood at any moment is the result of past and current flows of households and resources—financial, social-psychological, and time—into and out of the space in question. To understand the factors and processes that influence the decisions governing these flows is to uncover the roots of neighborhood change. One such dynamic in legacy cities is filtering, wherein an excess of high-quality housing supply deflates property values and erodes investment incentives in successively lower-quality submarkets.

The attributes of a neighborhood, including the composition of its households, likely influence the behavior of those residing and owning property there. This means that uncoordinated actions by households, property owners, and institutions that alter the package of neighborhood attributes will have unintended consequences as an inherent part of the filtering process. These consequences will be particularly severe if processes exceed threshold points. Behaviors ruled by gaming and self-fulfilling prophecies also are rampant as part of filtering. All this suggests that filtering yields socially inefficient and inequitable outcomes in legacy cities, spawning fiscal distress as a side effect. There is thus a prima facie case on efficiency and equity grounds for local policy intervention to counter this clear case of market failure.

Middle neighborhoods should be the locus of such intervention. By defusing the filtering process in this category of neighborhoods, it avoids subsequent filtering in the lower-quality submarkets of the city and its associated worst-case inefficiencies and inequities. Compared with an common approach that tries to reclaim neighborhoods only after filtering has run its devastating course, the approach recommended here would prove a much more effective, leverage-inducing use of public funds.

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References

AKERLOF, G. (1980) A Theory of Social Custom, of Which Unemployment May Be One Consequence, Quarterly Journal of Economics, 94, pp. 749-775.

AMERICAN ASSEMBLY (2011) Reinventing America's Legacy Cities. New York: author.

BROCK, W. and DURLAUF, S. (2000) Interactions-based Models, in J. Heckman and E. Learner (Eds.) Handbook of Econometrics, vol. 5. Amsterdam: North-Holland.

CRANE, J. (1991) The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing, American Journal of Sociology, 96, pp. 1226-1259.

FLIPPEN, C. (2004). Unequal Returns to Housing Investment? A Study of Real Housing Appreciation among Black, White and Hispanic Households. Social Forces 82: 1523-51.

FREEMAN, L. (2011). There Goes the Hood: Views of Gentrification from the Ground Up. Philadelphia, PA: Temple University Press.

FRIEDRICHS, J., Galster, G. & Musterd, S., eds. (2005) Life In Poverty Neighbourhoods. London & New York: Routledge.

GALSTER, G. (1987) Homeowners and Neighborhood Reinvestment. Durham NC: Duke University Press.

GALSTER, G. (2001). On the Nature of Neighborhood, Urban Studies 38 (12), pp. 2111-2124.

Galster, G. (2002) An economic efficiency analysis of deconcentrating poverty populations, Journal of Housing Economics, 11, pp. 303-329.

Galster, G. (2014) Nonlinear and Threshold Aspects of Neighborhood Effects, Pp. 117-133 in Soziale Kontexte und soziale Mechanismen [Social Contexts and Social Mechanisms], Edited by Jurgen Friedrichs and Alexandra Nonnenmacher. Wiesbaden, GER: Springer. DOI: 10.1007/s11577-014-0268-3

GALSTER, G., QUERCIA, R., & CORTES, A. (2000) Identifying Neighborhood Thresholds: An Empirical Exploration, Housing Policy Debate, 11(3), pp. 701-732.

GALSTER, G. & ROTHENBERG, J. (1991) Filtering in Urban Housing: A Graphical Analysis of a Quality-Segmented Market, Journal of Planning Education and Research, 11, pp. 37-50.

GRANOVETTER, M. (1978) Threshold Models of Collective Behavior, American Journal of Sociology, 83, pp. 1420-1443.

GRANOVETTER, M. & SOONG, R. (1986) Threshold Models of Diversity: Chinese Restaurants, Residential Segregation, and the Spiral of Silence, The Journal of Sociology, 18, pp. 69-104.

GRIGSBY, W., BARATZ, G., GALSTER, G., & MACLENNAN, D. (1987) The Dynamics of Neighborhood Change and Decline. London: Pergamon, Progress in Planning series # 28.

HYRA, D. (2008). The New Urban Renewal: The Economic Transformation of Harlem and Bronzeville. Chicago, IL: University of Chicago Press.

JARGOWSKY, P. (2014) Concentration of Poverty in the New Millennium: Changes in the Prevalence, Composition, and Location of High-Poverty Neighborhoods. New York: The Century Fund.

MALLACH, A. (2008). Managing Neighborhood Change: A Framework for Sustainable and Equitable Revitalization. Montclair, NJ: National housing Institute.

ROTHENBERG, J., GALSTER, G., BUTLER, R., & PITKIN, J. (1991) The Maze of Urban Housing Markets: Theory, Practice and Evidence. Chicago IL: University of Chicago Press.

SANTIAGO, A., GALSTER, G. & KAISER, A. (2008) "The Financial Consequences of Low-Income Homeownership." Unpublished paper, School of Social Work, Wayne State University, August.

SCHELLING, T. (1971) Dynamic Models of Segregation, Journal of Mathematical Sociology, 1, pp. 143-186.

SCHELLING, T. (1978) Micromotives and Macrobehavior. New York: Norton.

SCHNARE, A. & MACRAE, C. (1975) A Model of Neighborhood Change. Washington, DC: The Urban Institute, Contract report no. 225-4.

SIMMEL, G. (1971) George Simmel on Individuality and Social Forms. Chicago IL: University of Chicago Press.

STEGMAN, M., QUERCIA, R. & DAVIS, W. (2007). "The Wealth-Creating Potential of Homeownership: A Preliminary Assessment of Price Appreciation among Low-Income Home Buyers." In William M. Rohe and Harry L. Watson, eds., Chasing the American Dream: New Perspectives on Affordable Homeownership, pp. 271-92. Ithaca, New York: Cornell University Press.

TAUB, R. TAYLOR, G., and DUNHAM, J. (1984) Paths of Neighborhood Change. Chicago IL: University of Chicago Press.

TEMKIN, K. and ROHE, W. (1996) Neighborhood Change and Urban Policy, Journal of Planning Education and Research, 15, pp. 159-170.

VANDELL, K. (1995) Market Factors Affecting Spatial Heterogeneity among Urban Neighborhoods, Housing Policy Debate, 6(1), pp. 103-139.

WEBER, M. (1978) Economy and Society. 2 volumes. Berkeley CA: University of California Press.

WILSON, W. J. (1987) The Truly Disadvantaged. Chicago IL: University of Chicago Press.