

## Housing Decay: Cause or Symptom of Urban Decline?

*By Anthony M. Rufolo\**

Philadelphia has about 20,000 abandoned residential properties, and even as some of them are being demolished or renovated, newly abandoned units take their places. These abandoned structures and the many more thousands of properties which, though not abandoned, clearly are substandard, cast a pall over the landscape. This isn't only Philadelphia's story; it fits many other American cities as well. How did such a situation develop, and what can be done about it?

Economics can't answer all of the questions, but it's clear that economic forces do explain much of what has happened. Under-

standing these forces should help both with predicting how cities will change in the future and with determining what can be done on the policy side to get the most out of the limited resources available for improved urban housing.

### WHY URBAN HOUSING DECAYS

At the last census, Philadelphia had 673,390 housing units. About 70 percent of these units were built before World War II; and 15,615 reportedly lacked adequate plumbing facilities. The 364 census tracts that make up the City of Philadelphia show a wide variety of housing conditions. The percentage of abandoned housing varies from zero to almost 100 percent. Abandoned units represent less than 4 percent of the housing stock in the city overall, but these units are only the tip of an iceberg of residential deterioration. Where there is deterioration, it usually is

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associated with high crime rates, poor health care, and generally substandard living conditions—and this is a source of concern not only to those who reside in the affected areas. Neighborhoods that start slipping tend to become increasingly undesirable and ultimately may contribute to deterioration in other neighborhoods nearby.

At least part of this process can be traced to rising incomes and easier commuting, which have made suburban living more attractive over time. Until recently, the populations of large metropolitan areas have been growing. Increased commuting and population growth appear to explain a great deal about why we find a high concentration of low-income residents in central cities. Further, people with low incomes have relatively little money to spend on housing. Thus the available housing units are overcrowded, get little maintenance, and start to deteriorate. To the extent that this explanation is correct, there is little that a city by itself can do to improve housing conditions. It would be necessary either to change the housing and commuting preferences of higher income families or to provide the resources for low-income residents to afford better housing—both of which are beyond the grasp of local government.

**Housing Demand and Location.** The purchase of a house is likely to be the single largest investment most people make. Renters find that housing costs take a large percentage of their total budget, too. It's not surprising, therefore, that some people are willing to commute long distances to get a lower price for a given grade of housing.

All other things being equal, many of those who work in the city would prefer to live near their jobs.<sup>1</sup> This preference is what

drives up the price of city housing. But if inner-city locations are so desirable, why do they frequently contain dilapidated buildings and low-income residents? The answer may lie in the relation of housing expenditures to commuting costs.

People who move further out pay *higher* commuting costs to get *lower* housing costs. The out-of-pocket costs for commuting depend mainly on the distance to be traveled, whereas the savings that come from lower housing prices derive mostly from the amount of housing consumed. Everyone may find that he can save 10 percent on housing costs by moving a given distance further out. For a person spending \$100 a month for housing, 10 percent would amount to a \$10 saving, which might not be enough even to offset the direct costs of commuting, while someone who spends \$600 a month on housing would save \$60. Clearly, the person who spends more on housing would have a greater incentive to commute.

This incentive is offset somewhat by the fact that a higher income person is likely to put a greater value on his time and therefore dislike commuting more than someone with a lower income. Thus people with very high incomes will tend to stay in the city if commuting is very time consuming. The net result is relatively heavy concentrations of high-income families who can pay to avoid commuting alongside concentrations of low-income families who have little to gain by commuting.

Of course many other considerations, such as family size, help determine the demand for housing; but income probably is the most important single determinant of housing expenditures. As population and average income have risen through most of the postwar period, the total demand for housing has risen too. At the same time, easier commuting has made it possible for much of this increased demand to be met at lower cost in the suburbs. These developments have left city housing primarily to the rich and the poor.

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<sup>1</sup>For a discussion of the relation of commuting costs to rents, see Nonna A. Noto, "The Economics of Commuting in a Higher Cost World," *Business Review*, Federal Reserve Bank of Philadelphia, July/August 1977.

**Low Income and Deteriorating Housing.** Low-income residents can't afford high-grade housing. When there aren't enough low-grade units to meet their demand, higher grade units have to be made to accommodate more people at a lower price per occupant. The price can be lowered further if maintenance is reduced. But higher occupancy rates and reduced maintenance can hasten deterioration (see HOUSING DETERIORATION AND THE POOR).

older structures are as good as they were when they were built, and some may be better. It's rather the amount of maintenance a building gets that mainly decides whether and how quickly it will deteriorate. And the demand for housing of a given grade is a significant determinant of how much maintenance a building will get. If a unit is of fairly high grade but there is a relatively strong demand for low-grade housing where it is located, then the owner is likely to let it

### HOUSING DETERIORATION AND THE POOR

It may seem surprising to argue that the poor can outbid the middle class for housing, but that is indeed what many economists have argued. The key point is that the poor have to live somewhere. If there aren't enough low-grade units to meet the demand, the poor will bid standard grade units away from other housing consumers by crowding people in.

We can visualize each person ranking all locations in the region based on how much housing he wants, where he works, and how much he'll have to pay for transportation. Many people who work in large cities would like to live in them, too. But as more of them try to locate in the cities, they drive up the rents. Middle-class citizens then are most likely to put up with higher transportation costs in order to save on housing expenditures in the suburbs.

Where does this leave the poor? If all the available units are too costly for the middle class, the poor surely won't be able to afford them. But by doubling up, they cut the rent in half. Thus they crowd into expensive units, but they don't have as far to commute. The crowding leads to faster depreciation, and maintenance costs rise. Because the poor can't afford the maintenance costs either, the building starts to deteriorate. As the building falls in value, rents or ownership costs fall, and the overcrowding is reduced. At last the poor end up with more housing of a lower grade.

Of course, many other forces can influence housing patterns and the quality of the housing units at a given location. Some lower income people don't own cars and therefore are constrained to live where public transportation is available. Cities usually offer better welfare benefits to the poor. And many suburbs try very hard to keep lower income families out. But while many of these forces may contribute to the concentration of low-income families found in cities, the economics of the housing market still seems to provide an important part of the overall explanation of the observed patterns.

Housing is a long-lived commodity, and buildings may remain standing long after deterioration has destroyed their attractiveness for middle-class residential use. But age alone doesn't explain deterioration.<sup>2</sup> Many

deteriorate by increasing the occupancy rate and reducing maintenance. A lower grade unit may be improved through increased maintenance or renovation if there is a relatively strong demand for higher grade units at the site.

Thus the grade of housing in any area is determined primarily by the demand for housing there, since more or less maintenance (hence higher or lower grade housing) will appear in response to demand. As a home or apartment house gets older, main-

<sup>2</sup>Although some people lay great stress on age, Philadelphia Fed researchers have found that age seems to explain very little about which houses are abandoned. See "Jobs in Philadelphia: Experience and Prospects," Appendix F, "Housing Abandonment," *Business Review*, Federal Reserve Bank of Philadelphia, December 1975.

tenance costs tend to rise and the structure may become technologically outdated or out of style. But these deficiencies usually are relatively inexpensive to correct compared to the cost of razing the structure and building a new one.

In short, the current state of housing in Philadelphia and other cities—in particular, the concentration of low-income residents and deteriorated buildings—is at least partially a result of basic economic forces. Relatively low transportation costs and rising incomes have led to more decentralization. And the rising postwar population has produced a greater demand for low-income housing. The lower cost for suburban housing of a given size and grade has been more attractive to some upper income people (though not necessarily those with the highest incomes) because they purchase or rent more and better housing, and the balance of economic forces has left a higher percentage of people with very low and very high incomes in the city. The city's low-income people can afford only lower grade housing, and the market responds to that demand.

But other forces also have influenced the speed and degree of change in the condition of urban housing.

#### **OTHER FORCES AFFECT HOUSING**

Among the most important forces that have an impact on the housing market are tax and public service levels, neighborhood characteristics, and mortgage availability. Tax and service levels, along with neighborhood characteristics, determine how much each person may be willing to pay for a house in a given location; and without mortgage money, a prospective homebuyer would have to restrict his looking to houses he could afford to purchase with cash—or else keep renting.

**Taxes and Services.** Other things being equal, a community with high tax rates is less attractive than one with low tax rates. But taxes are only one part of the local government package. People also consider

what they get for their tax money. High levels of services—good schools are the most frequent example—easily can offset the negative impact of a high tax burden. Unfortunately for them, cities seem to suffer on both sides of the tax-and-service package.

One reason for high taxes and low service levels in cities is the high concentration of poor people. Low-income families that live in cheap housing provide little tax base to offset the cost of the city services they consume. The city makes up its tax shortfall by placing a heavier burden on businesses and upper income families, which gives them even more incentive to flee the city. And when they get to the suburbs, it gives them an incentive to try to keep the poor out.<sup>3</sup> In a study of 87 large metropolitan areas, economists David F. Bradford and Harry H. Kelejian found that higher concentrations of poor people in the inner city and an unfavorable tax-benefit package did indeed increase the flight of the middle class (see SUGGESTIONS FOR FURTHER READING).

**Neighborhood Characteristics.** It often is said that deteriorated housing produces an environment which breeds crime, disease, and other undesirable social conditions. In fact, on the neighborhood scale, physical deterioration and related social conditions are likely to be equally direct outcomes of the poverty of the residents. But when it comes to individual houses, it's quite clear that neighborhood characteristics do have a bearing. The value of a housing unit depends not only on the condition of its structure but also on its access to schools, playgrounds, safety, clean air, and employment. If these and other neighborhood characteristics change, the value of the unit probably will change also. If the playground around the corner becomes unsafe or the building next door is

<sup>3</sup>For a more detailed explanation see Anthony M. Ruffolo, "Anatomy of a 'Fiscal Crisis'," *Business Review*, Federal Reserve Bank of Philadelphia, June 1975.

abandoned, the value of the unit is likely to drop. Lower value usually leads to less maintenance and, therefore, further deterioration. And deterioration of one unit is likely to have a depressing effect on others nearby.<sup>4</sup>

Because of these interactions, deterioration is likely to spread quickly once it starts—more quickly than if housing demand alone were at work. Decisions about the degree of maintenance a housing unit will get seldom are made with an eye to their effect on the rest of the neighborhood. The owner of each unit might be better off if all the other owners agreed to improve maintenance of their pro-

perties; but in a period when the neighborhood is declining, such an agreement is very hard to reach or enforce.

**Mortgage Availability.** Because few people can pay the full price in cash when they buy a house, whether they buy and what they buy depend upon the availability of mortgage money. This is as true of the inner-city housing market as of any other. Yet many people argue that conventional mortgages are not readily available in some neighborhoods. Part of this dearth can be explained by neighborhood deterioration, but the problem may be intensified by certain special features of the mortgage market (see MORTGAGE MONEY FOR CITY HOUSING).

<sup>4</sup>“Housing Abandonment.”

### MORTGAGE MONEY FOR CITY HOUSING

Lenders are concerned mainly with a prospective borrower's credit standing when they consider consumer loans. But when the loan in question is for a mortgage, the lender has to pay attention also to the characteristics of the house and its neighborhood, since they help determine the riskiness of the loan.

The risk connected with the house itself is a matter of what condition it's in at the time the loan is made and what's likely to happen to it thereafter. Many inner-city homes have low selling prices because they're in poor condition and require a lot of maintenance. The expense of maintenance can be high: it can cost as much to put a deteriorated house back into shape as it does to buy the whole structure. Thus a borrower who elects to buy a low-priced, deteriorated structure doesn't have much to lose; it may pay him to defer required high-cost maintenance and let his house deteriorate still further. If the house becomes unlivable, the borrower-owner may find that he loses less by defaulting on the mortgage than by making repairs. But when he does, the lender—whose collateral for the loan is the house—may find that he can't get enough out of reselling it to pay the cost of foreclosure and still achieve a market rate of return.

Even a sound house can lose much of its value if the neighborhood deteriorates. Thus the lender has to worry about the stability of housing prices throughout the neighborhood. In an area where housing prices are unstable, there's a good chance that any individual house will lose a large part of its value.

Another circumstance working against loans in older neighborhoods, where the housing values are lower, is the relatively higher cost of servicing smaller loans. The fixed costs associated with servicing an \$8,000 loan, such as billing and bookkeeping, may not differ much from those associated with servicing a \$24,000 loan. But the fixed cost per dollar loaned would be three times higher on the smaller loan. The cost of mailing a statement, for example, is the same for both loans.

In short, it's not hard to see why lenders might be eager to make loans in one area but not in another. It remains to be seen whether or not these economic forces explain all of the observed variation in lending patterns.

In many ways, mortgage markets are similar to other markets. There are buyers and sellers as well as a market price. The borrowers are the buyers, the lenders are the sellers, the service is the use of a sum of money, and the price is the interest payment. Not all mortgages are the same, any more than all other commodities (say, automobiles) are the same, so prices may differ even when the market is competitive. But mortgages differ significantly in their risk of default as well as in their terms. Risk, which derives from characteristics of the borrower, the property, and the neighborhood, strongly affects the costs and thus the profits of mortgage lenders. Profits are affected also by the fixed costs of servicing loans, and these fixed costs take a proportionately larger bite out of income from smaller loans than from larger ones.

Thus the low income of many potential borrowers, the high maintenance costs of most of the housing units, and the instability of housing values combine to make lending in some inner-city areas fairly risky.<sup>5</sup> Some of this risk can be offset by higher mortgage interest rates where interest-rate ceilings don't limit the size of risk premiums.<sup>6</sup> But someone must pay the expected costs of default if risky mortgages are written. Lenders must absorb them in lower income, or borrowers in higher interest payments, or citi-

<sup>5</sup>Andrew F. Brimmer has pointed out the risks that face urban lenders, especially minorities. "The latter certainly cannot be accused of racial discrimination, and they focus virtually all of their lending in urban areas. Yet, the structure of their asset portfolios suggests strongly that they do face significantly higher risks than do a comparable group of institutions—owned and operated by whites—who concentrate mainly in the suburbs." (Quoted in the *American Banker*, May 23, 1977.)

<sup>6</sup>For more detail on risk premiums in setting interest rates see James M. O'Brien, "A Case for Market Interest Rates," *Business Review*, Federal Reserve Bank of Philadelphia, March/April 1977, pp. 4-5. For interest-rate ceilings see Helen Frame Peters, "The Mortgage Market: A Place for Ceilings?" *Business Review*, Federal Reserve Bank of Philadelphia, July/August 1977

zens at large through increased taxes.

Not all risk premiums, however, strictly reflect expected costs to the lender. There may be a further premium tacked on simply because most people and businesses just don't like to take risks. Most people prefer an investment which gives them a fixed return—say 10 percent—to one which gives them an uncertain return with the same payoff—say 20 percent half the time and nothing the other half; so the borrower who offers an uncertain return must offer an additional incentive as well.<sup>7</sup>

Other forces also may affect mortgage availability. Discrimination, for example, has occurred in the past in employment, housing, and elsewhere, and it's possible that lenders discriminate against loan applicants from minority neighborhoods even when they have reason to believe that lending would be profitable.

One other feature unique to the mortgage market bears looking at. Lenders who reject mortgage applications in certain neighborhoods on the basis of any criterion other than market conditions and ability to repay could be contributing unwittingly to the decline of those neighborhoods. An individual lender who relied on the wrong criterion for an indi-

<sup>7</sup>An extreme example will show how a default premium differs from a risk-aversion premium. Suppose you are offered the following deal: You pay \$100 and a coin is flipped; heads you get \$200, and tails you get nothing. If you make such a deal many times, on average you will neither win nor lose. The \$200 payoff when you win just offsets the equal possibility that you will get nothing. The extra \$100 can be considered a default premium.

Unless you just like to gamble, however, you will not accept the deal, because you are giving away a sure \$100 for an uncertain return that will average \$100. If heads paid \$220, you might decide to take the risk because the average return is greater than your cost. The extra \$20 would be a risk premium.

Pooling eliminates the motivation for a risk premium in this way: Suppose a thousand people agree to the deal and then agree to divide their winnings equally. Now each is virtually guaranteed of getting \$100 and would be willing to accept a smaller risk premium.

cator of risk soon would notice that he was missing out on profitable loans and would adjust his behavior accordingly. But if all lenders used the same criterion, none of them would issue loans in those neighborhoods; houses would lose value and, eventually, they could become unsalable. In this case, the lenders' predictions about the future of the neighborhood would be verified, and the criterion used to make the initial judgment—however inappropriate—would be reinforced. The lenders' judgments would be self-fulfilling prophecies, because by predicting neighborhood decline they would be creating the conditions that produce neighborhood decline (see REDLINING: FACT OR FICTION?).

tices, discrimination, or feedback effects of lending decisions.

### **SORTING OUT POLICIES**

Much past and present deterioration of the inner city can be explained by the increased demand for lower grade housing there. The relation of housing costs to commuting costs produced an initial incentive for the poorer members of regional populations to settle in the inner city, and this movement has been encouraged by a variety of other forces. As regional population growth in the postwar era led to increased demand for low-income urban housing, that demand was met by upping the occupancy rates of higher grade units and deferring maintenance. Thus a

### **REDLINING: FACT OR FICTION?**

Many people use the expression 'redlining', but not all of them agree on its meaning. Some use it to mean the refusal by lenders to write mortgages in certain areas. Others use it as a name for any situation in which it's harder to get conventional mortgage money for a house in one neighborhood than for a house in another. While both situations may occur, neither has to be construed as a sign that lenders are malevolent. Unusually high risks may make it unprofitable to lend in some areas.

If certain areas receive fewer mortgages for sound economic reasons, then redlining is not really the issue. The issue is who should absorb the cost if mortgages are issued—the borrowers, the lenders, or government (that is, taxpayers at large). Forcing lenders to issue mortgages will not reduce the real economic cost, it will just shift that cost to them. And if the cost becomes very high, lenders may close up shop in the affected areas. Further, low-income borrowers are not likely to be in a position to absorb the cost. The question then is whether there is some reason, other than aid to low-income residents, why government should act to get these mortgages issued.

It may be, however, that some lenders make decisions for reasons that are not economically sound. They may discriminate, or be overly risk averse, or use inappropriate lending criteria which result in self-fulfilling prophecies that waste valuable housing resources. Each of these defects has a policy remedy that could increase the flow of mortgage money to the urban housing market.

The challenge is to determine what the situation really is. If lenders are responding appropriately to market forces, then the charge of redlining is fiction. But if other factors are influencing the market, then redlining merits concern and government action may be appropriate. There is no point in pouring money into an unsalvageable area, but it is equally wasteful to let potentially sound areas decline because of credit shortfalls.

Thus lack of mortgages could contribute to the decline of a neighborhood. The problem is to determine to what extent mortgage patterns are a response to reduced demand or increased risk and to what extent they can be traced to overly risk-averse lending prac-

picture of changing demand provides the background for current policy deliberations on the deterioration of residential properties in the cities.

**Helping People.** Freely functioning mar-

kets generally respond to people's preferences by allocating society's scarce resources in the most efficient way, getting the maximum output out of a given level of input. While many people may not like the distribution that results, changing it is sure to make someone worse off. It doesn't follow, however, that government never should move to correct undesirable conditions in the housing market. But people rather than governments are the entities that ought to be the beneficiaries of public redistribution programs. This distinction is lost in policy debate when deterioration is cited as evidence that more funds ought to be transferred from Federal and state agencies to urban governments or other organizations. The people who can't afford to live anywhere but in deteriorated housing, rather than the *governmental units*, are the appropriate targets for aid. Thus direct grants would appear to be a more effective policy alternative than restricted aid or aid to urban governments, especially since the poor live in nonurban areas, too.

If an important cause of housing deterioration is the requirement for low-cost housing, then raising the incomes of the poor should increase their demand for higher grade housing and lead to gradual improvement in urban housing stocks. But the net impact on housing is likely to be much lower than the total income transfer might make it appear. The reason is that the poor don't spend all of their income on housing and don't spend all of the increments to income on housing. In fact, they use only about one-fifth of their income for this purpose. And evidence suggests that they probably wouldn't increase their aggregate shelter expenditures by more than about one out of every three additional dollars of income.<sup>8</sup>

<sup>8</sup>This estimate is based on data contained in U. S. Department of Labor, Bureau of Labor Statistics, "Autumn 1976 Urban Family Budgets and Comparative Indexes for Selected Urban Areas," Table A.

Does this mean that income maintenance is not an effective instrument for stemming urban decline? It all depends on whether the objective is to aid the poor or to improve the housing stock. If aiding the poor is the objective, it seems preverse to force them to consume more housing than they would wish, for they would like to increase their consumption of many other items. But if there are overriding reasons why it is desirable to focus on housing, then a well-designed program of rent subsidies could be the most effective tool. In any case, merely destroying deteriorated units can only hurt the current residents by taking away part of the housing stock they can afford.

While income maintenance and rent subsidies would alter housing demand, forces other than demand also can have an impact on the city housing market. Once each of these forces is identified, then the appropriate policy response is fairly clear.

**Removing Obstacles.** If cities are being forced to place large tax burdens on businesses and upper income residents to finance services to the poor, for example, then the cities can't compete fairly with the suburbs for relatively well-off residents. In order to offset some of the additional flight to the suburbs, the states and the Federal government—which currently finance most direct welfare payments—could take over the cost of providing services to low-income residents. Doing so would not only decrease the burden on city taxpayers but also reduce the incentives for suburbs to keep the poor out. Also, city government could improve its productivity in providing public services. While increasing productivity is easier said than done, there appears to be much room for improvement.<sup>9</sup> And it's an area where the city itself can start moving instead of waiting

<sup>9</sup>For example, see the discussion in *Improving Productivity in State and Local Government* (New York: Committee for Economic Development, 1976).

passively for some other body to act.

Finally, if mortgage availability is identified as a difficulty, the cause of mortgage tightness will determine the appropriate response on a case-by-case basis. If unusually high default risks are discouraging lenders, then it must be recognized that high interest rates and stringent terms reflect the true costs of lending in certain parts of cities. But if lenders are just too risk averse or have created a self-fulfilling prophecy, then either government-sponsored insurance or the pooling of private funds should be effective in financing city mortgages. Of if discrimination is the problem, then strict enforcement of antidiscrimination laws is called for.

#### **AN EYE ON THE BASICS**

Direct attacks on symptoms may seem

appealing, but they can have hidden drawbacks. Some people point to successful renewal projects, for instance, as evidence that cities can be renovated; but because these projects reduce the supply of low-income housing without reducing the demand for it, they may only shift the cycle of crowding and deterioration to a new location instead of arresting it.

Thus the basic economic forces continue to operate, and no program that disregards them can have much hope of being effective. Programs with the aim of helping the poor or improving the city, such as rent controls, can even have perverse effects in the long run if they ignore these forces. But policies that are formulated with these forces in mind can help decisionmakers get the most out of the limited resources at their command.

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### SUGGESTIONS FOR FURTHER READING

For more on economic determinants of location patterns see Richard F. Muth, *Cities and Housing* (Chicago: University of Chicago Press, 1969). Further discussion of the effects of low income on housing demand and deterioration can be found in W. Lee Hoskins, "Housing the Poor: A Frontal Attack," *Business Review*, Federal Reserve Bank of Philadelphia, November 1970, pp. 9-16. An interesting discussion of the past and prognosis for the future of cities can be found in Anthony Downs, "The Future of Large, Older American Cities to the Year 2000," in John J. Mulhern, ed., *The Future of American Cities* (Philadelphia: Federal Reserve Bank of Philadelphia, 1976). For some empirical work on the forces contributing to the flight to the suburbs see David F. Bradford and Harry H. Kelejian, "An Econometric Model of the Flight to the Suburbs," *Journal of Political Economy* 81, 3 (1973), pp. 566-589.

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