Why Does Anybody Still Live Here?

Real estate plays a critical role

in slowing population loss in

declining central cities.

THE 1990'S WERE generally seen as a good decade for American cities. This period saw the renaissance of many downtowns. In addition, a new breed of mayors appeared who better understood the need for older cities to compete with their suburbs and with new cities. However, the good news obscured the fact that many of the nation's largest cities, particularly those in the Northeast, continued to be mired in long-term decline.

The long-term nature of urban decline is illustrated by the fact that since World War II, of the 15 most populous cities, eight (Baltimore, Buffalo, Cleveland, Detroit, Philadelphia, Pittsburgh, St.

JOSEPH GYOURKO

Louis, and Washington, D.C.) have lost population in every decade. Another three cities — Boston, Chicago, and Milwaukee — have smaller populations now than in 1950. Of the large Northeastern cities, only New York City has been immune to this negative trend.

There are many reasons for urban decline. Many urban economists point to the loss of traditional advantages associated with being near water transportation. In addition, as air conditioning and increased wealth have allowed households and firms to locate in warmer climates, cold weather has become an increasingly negative amenity. Poor government policy, at both the local and federal levels, undoubtedly is another factor behind the decline of many cities.

My hometown of Philadelphia suffers from all these disadvantages. Being at the confluence of two great rivers no longer conveys the productive benefits to most manufacturers it once did. The weather has not changed, but the accessibility of the South and West has opened up new competition — and most people clearly like warmer, less humid weather. Finally, poor city government has been a great burden, as evidenced by the fact that the local wage tax in Philadelphia is more than 4 percent. The result is that Philadelphia is no longer is a truly competitive place to live or work

The purpose of this article is not to detail the reasons for urban decline, but

rather to identify the nature of this decline. The pertinent question about declining cities is not "why aren't they growing?" but "why are they still there?" Rapidly growing cities expand at dizzying rates — for example, Las Vegas has grown by more than 50 percent in four out of the last five decades. However, declining cities shrink slowly. The largest rate of population decline in the 1990s among the set of consistently declining cities in the post-WWII era was only 12.5 percent (in St. Louis). Even more worrisome is the fact that urban decline is associated with poverty and social distress: across all cities, the correlation between the poverty rate in 1989 and population growth in the 1980s was -0.4. While corporations downsize by firing their least-skilled workers, cities appear to consistently downsize by losing their most skilled and affluent residents. The answer to the question of why these cities are still here lies in their durable housing stock: that determines the nature of urban decline.

KEY FEATURES OF DECLINE

There are two striking features of urban decline. First, the decline is long and persistent. This is not to imply that decline is inevitable once it begins. Indeed, cities such as Boston have reversed their fortunes following initial periods of decline. The point is that if decline is not reversed, it

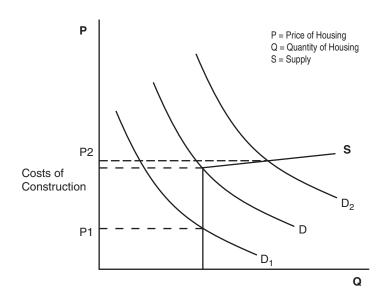
will go on for a many decades. Cities do not suddenly depopulate and disappear. Rather, they die very slowly.

Second, the loss of population is strongly associated with a relative decline in the skills and wages of the population. People earn less in declining cities than in growing cities. However, this lost labor income is relatively small and is roughly proportional to wages across the skill spectrum. Moreover, the wage loss is negligible for low-skilled workers and for those who are unemployed. On the other hand, housing prices are much lower in declining cities — on the order of 50 percent. As a result, low-skilled workers and the unemployed are attracted to declining cities because they benefit from the substantially lower-priced

housing stock, without having to give up much, if anything, in terms of their labor income. Higher-skilled workers also benefit from the low-priced housing in declining areas, but these places are not as attractive because the depressed labor market is more costly to them. In addition, the attractiveness of cheap housing does not increase proportionately with income. That is, someone earning five times my income generally does not live in a house that is five times bigger or better than my home.

Some very simple, yet powerful, economics underpins these two features. Because housing is durable, it is in almost completely inelastic supply in the short run. This is represented by the vertical part of the supply schedule in Figure 1. When

Figure 1 The Nature of Housing Supply and Construction Costs



house prices are below the cost of new construction, there is no new construction and the stock of housing is fixed. After all, no profit-oriented developer will build if he cannot sell the unit for more than it costs to construct. However, the existing housing does not immediately disappear even if there is a decline in demand, as indicated by the shift from D to D₁. The housing units remain, although their values decline to P1 in response to the drop in demand.

When prices rise above the cost of construction, new supply is forthcoming if there is an increase in demand as shown from D to D₂. Prices increase only slightly. The flat part of the curve in Figure 1 represents highly elastic supply. The data clearly support this view everywhere but in certain parts of California — that is, except for California, increased demand produces new housing construction. Thus, a higher demand typically does not lead to big increases in housing prices, but to big increases in the housing stock.

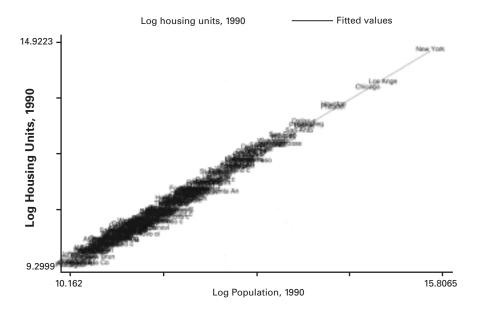
DURABLE HOUSING

This is a bricks-and-mortar interpretation of urban dynamics, based on a strong connection between the number of people and the number of housing units. In theory, the connection between the number of people and the number of housing units

in a city could be weak. Declining cities could see large increases in vacancy rates, and growing cities could see increases in the number of people per unit. But a plot of housing units versus people (in log form) using 1990 Census data shows that this is not the case (see Fig. 2): the link between housing stock and city population is extraordinarily tight. In statistical terms, a one percent higher stock of housing units is associated with a one percent higher population. This very tight relationship between housing and people also holds if we look at changes over decades.

For the durable housing model to explain the persistence of places such as Philadelphia and Detroit, it also must be cheaper to live there than to build a comparable house on the edges of the Sunbelt, where land is essentially free. The data confirm that this is the case. The fraction of homes that were priced below the physical costs of construction were estimated using the 1980 and 1990 decennial censuses and information on construction costs of single family homes provided by the R. S. Means Company. By definition, land is free (or has negative economic value) when the house value (which includes land) is less than what it would cost to replicate the physical unit. The estimates of the percentage of homes valued below the physical costs of construction for more than 100 American cities in 1980 and 1990 confirm that residential land is of little value in declining cities.

Figure 2 Housing Units and Population Levels, 1990



Summing across cities to obtain a national picture reveals that 41 percent of single-unit housing in cities in 1980 was valued below the cost of new construction. In the central cities of the Northeast and Midwest, nearly 60 percent of all owned, single-unit, attached, and detached residences were valued below the cost of new construction. One-third of the stock in these regions was worth no more than 80 percent of construction costs. By contrast, in the West only 5 percent of homes were priced more than 20 percent below new construction costs, and nearly three- quarters were valued in excess of 120 percent of construction costs. These regional patterns persisted in 1990 despite a general rise in housing values. By 1990, the Midwest still

had a large amount of very cheap housing relative to construction costs, while the West still had plenty of land that was worth a great deal, and the South was between these two extremes. What the data confirm is that most residential land in declining cities has little, if any, value.

Cheap housing plays a vital role in keeping declining cities attractive. While declining cities have less-active labor markets (as shown by their higher unemployment rates and lower wages), lower housing costs compensate for the lower incomes, especially for people with low skills. Table I shows the wage and unemployment differences among male workers between the ages of 25 and 55 in a set of growing and a set of declining cities in the

Table I Labor and Land Market Fundamentals Across Growing and Declining Cities, 1990

	Growing Cities	Declining Cities	Percentage Difference
Mean Hourly Wages	\$14.51	\$13.27	8.6
Unemployment Rate	6.1%	10.0%	⁻ 63.9
Mean Price for Owned Houses with Three Bedrooms	\$112,540	\$56,373	49.9

1980s: the ten fastest growing cities that had populations of at least 100,000 at the beginning of the decade, and the ten cities that declined the most.

The first row of the table reports the wage differences between growing and declining cities: prime-age male workers in declining cities earned \$1.24 less per hour than workers in growing cities, an 8.6 percent gap. This was not just a result of lessskilled workers living in declining cities. A detailed regression analysis revealed that workers in declining cities earned less, even after holding observable human capital characteristics constant. The second row of the table shows differences in unemployment rates. The unemployment rate was 6.1 percent among the prime-age males living in the growing cities, and 10.0 percent in the declining cities. This gap was larger among low-skilled workers, and was not just the result of lower-human-capital workers living in declining places.

A back-of-the-envelope calculation demonstrates the labor market cost paid by workers who live in declining cities. If unemployment represents the share of time that workers do not earn wages, and if we assume that this time is not itself valuable to workers, then annual wages (assuming a 40-hour week and a 50-week year) are \$27,250 in growing cities and \$23,886 in declining cities. This translates into a \$280 per month difference in earnings between these two areas. While this estimate is clearly rough, it does give a ball-park estimate of the reduced earnings in declining cities.

The third row of the table lists self-reported prices for three-bedroom homes. The median house price is \$112,540 in the growing cities and \$56,373 in declining cities. Using a standard method of estimating the annual cost of housing (multiplying the price of the house by a 7.85 percent cap rate) the difference in the annual cost of housing is \$4,404, or about \$367 per month. This gap is, in fact, larger than the wage costs of living in declining areas (\$280 per month).

The explanation for the gap between housing prices and wages is lower amenities

in declining cities: unattractive climates, high taxes, poor public services, and significant social problems. This explanation contradicts the hypothesis that declining cities are kept in place by agglomeration economies in production (or by fixed productive infrastructure). Instead, it points to the important role that cheap housing appears to play in attracting lower-skill and lower-income people to declining cities.

CONCLUSIONS

Urban decline is so long-lived primarily because housing is so durable — that is, people remain in declining cities because of cheap housing. When housing units finally decay, people leave and the city shrinks — literally. However, because housing depreciates slowly, this decline is very drawn out. After all, it can take decades or even centuries for a house to become uninhabitable — or unsalvageable. This is the answer to the question "why are they still here?"

Cities can grow at extremely fast rates because production of new housing can occur very rapidly, absent binding land use controls. However, their rate of population decline is bounded by the slow rate of depreciation of the housing stock. Absent a change in the negative factors discussed above that are buffeting declining cities, one should expect more of the same — slow, steady decline on the order of 1 per-

cent to 3 percent per year (the estimated long-run rate of depreciation of housing).

Durable housing also appears to underpin the fact that declining cities tend to become concentrations of relatively lowskill and low-income residents. The data are clear that cities losing population do not lose high- and low-skill individuals proportionally. Declining cities have relatively more high school dropouts and fewer college graduates than growing cities. They also have greater poverty rates and lower household incomes. Regression analyses from our working paper strongly suggest that cheap housing underpins these correlations, for when housing prices are controlled the statistical relationship disappears. Stated differently, accounting for the impact of cheap housing in declining cities explains why cities losing population tend to have greater concentrations of poorly-educated and low-income people.

The tendency of declining cities to disproportionately attract the poor is particularly important, since concentrations of poverty deter growth. If low-skill cities have lower rates of innovation, or have social problems that then repel future residents, the tendency of cheap housing to attract the poor may encourage a vicious cycle. A preliminary urban decline causes the skill composition of the city to shift. Then, this low-skill composition drives out future residents, and further depresses the growth of the city.

The relationship between population decline and social distress also has potentially important housing policy implications. It suggests that it is not helpful to the long-run health of declining cities to build more so-called affordable housing. There already is plenty of very cheap housing in these areas — housing that is valued well below the physical costs of construction. Since such housing is particularly attractive to less skilled workers, providing more of it is unlikely to benefit the city. This is a case where the best of intentions may have the most unintended consequences.

This article is based on research carried out with Professor Edward Glaeser of Harvard University. Details provided in our working paper "Urban Decline and Durable Housing" are available on the Zell/Lurie Center's web site: http://realestate.wharton.upenn.edu.