

How Much Does Declining Household Formation Contribute to Rising Homeownership?

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Abstract

The 1990s saw widespread increases in homeownership rates, suggesting that a larger share of households own their homes. However, the increases may in part be due to renters dropping out of the housing market. This paper investigates the extent to which the homeownership increases in the top 100 U.S. metropolitan areas is the result of the decline in household formation and the displacement of would-be renters from the housing market. We expect to find: The effect of declining household formation on homeownership attainment is most evident among adults under age 35, adults of lower educational attainment or income level, minorities, and recent immigrants. While large differences exist across metropolitan areas, the impacts are most evident in metropolitan areas that received a large number of in-migrants, and where housing construction lagged behind employment growth. The drop in household formation is reflective of both affordability problems and voluntary changes in household structure.

Extended Abstract

The 1990s saw a concerted increase in homeownership rates in most U.S. metropolitan areas, reversing the decade of stagnation observed in the 1980s (Myers *et al.* 1992; PD&R 2001; Simmons 2001b). While homeownership rates of the elderly have increased in every state during the 1990s, minorities and young adults struggled to keep up with the rising tide (Simmons 2001a).

The increases in overall homeownership rates have been widely touted as a positive sign of housing well-being in America. However, there are two sides to the story of rising homeownership. The largely accepted one is that a larger share of households own their own homes, reflecting growing participation in homeownership and wealth building during the 1990s.

The flip side of the story is that the homeownership increase may be the result of shrinking household formation. Renter households are usually the primary victim of declining household formation. The loss of renters will inadvertently increase homeownership rates, albeit in a negative way. Said alternatively, the increases in homeownership do not necessarily mean that there are more homeowners relative to the population. Facing challenges in the housing market, many people may have delayed the formation of households. Instead, they may have chosen to live with parents or some other adults. In certain circumstances, renters are so discouraged that they may drop out of the housing market entirely. In these two scenarios, both

population growth and owner household growth surpass the growth in the number of renter households. The increase in homeownership rates would come at the expense of renters, which does not adhere to the federal policy of expanding housing opportunities.

Demographic Factors on Housing

Demographic factors play an important role in how consumers respond to housing market conditions. Housing decisions are based on long-term planning (Borsch-Supan 1990). In a sense, housing attainment is a quasi-accumulative process, which requires life-long household savings (Pitkin 1990).

Because of the unique characteristics of housing, households seldom adjust their housing consumptions instantaneously to the changes in household conditions. In other words, there is a time lag or inertia in housing adjustment. For instance, older households who already own homes are largely insulated from market fluctuations. Even among those who made adjustment, those elderly households that continue to own typically do not reduce home equity (Megbolugbe, Sa-Aadu, and Shilling 1997; Venti and Wise 2001).

In contrast, young households and newly-arrived immigrant households encounter the full market forces. They are especially disadvantaged when competing with owner households who have accumulated wealth through homeownership for a

while. As new market entrants, their household formations are particularly sensitive to deteriorating affordability. For these vulnerable groups, the relative cost of housing and potential earnings are key determinants of household formation, which has significant implications to their subsequent housing tenure decisions (Haurin, Hendershott, and Kim 1994).

In the past decade there has been a widespread recognition of the importance of the demographic factors on housing. There are large differences in homeownership attainment between age groups and race-ethnic groups which often dominate more refined relationships of market adjustment (Masnick 2002).

More recently, housing scholars have begun to study homeownership attainment of immigrants and focus on the role of immigration in shaping housing demand (Pitkin *et al.* 1997; Myers, Megbolugbe, and Lee 1998; Painter, Gabriel, and Myers 2001; Joint Center for Housing Studies 2002). Immigrants, especially those who came to the United States recently, are much less settled than long-time immigrants and U.S.-born residents. As a result, new immigrants are particularly vulnerable to the problem of housing affordability. Many recent immigrants have to double up and delay household formation (Myers, Baer, and Choi 1996; Myers and Lee 1996).

Not widely recognized is the effect of household formations on

homeownership rates, a relationship suggested by Hendershott (1988) and Green (1996). In theory, declining supply of housing, especially multifamily housing, increases the cost of household formation (Skaburskis 1994). What is less known is how the delayed household formations may inadvertently increase the homeownership rate. When headship rates decrease, the decrease typically comes from foregone renter households who are deducted from the denominator of the homeownership rate, thereby increasing the overall homeownership rate. In a recent analysis of trends in the 1990s for the 50 states among young adults, Myers (2001) found a strong correlation between decrease in household formation and increase in the homeownership rate in selected age groups, providing preliminary evidence for the notion that declining household formation is attributable to the rise of homeownership rates.

The Demographic Effect in the 1990s

The demographic effect of housing may be particularly strong in the 1990s for the following reasons: The decade witnessed one of the longest periods of sustained economic growth in the nation's history. The widespread income growth was translated into higher demand for housing. There has also been a large increase in immigrant population, particularly in gateway metropolitan areas. The influx of immigrant population not only increases housing demand, but also shifts household

structure and housing preferences, e.g., larger household size, lower rates of divorce, and a greater share of population being married couples. Meanwhile, more jurisdictions, especially in high growth areas, have adopted local growth control policy to regulate land use, which in turn constrains land supply for housing construction (Pendall 1995; Levine 1999). Rental housing is more vulnerable to land use restrictions which will translate into a higher rent. Accompanying these factors are rapidly escalating affordability problems, especially among urban minorities and new immigrants (Simmons 2004). Evidently, along with the rising homeownership comes the growing prevalence of overcrowding in the United States during the 1990s; the upward trend has persisted for the second consecutive decade (Simmons 2002).

Although the affordability problems are threatening, they may not decrease homeownership rates. Instead, many vulnerable individuals may delay the formation of households or get pushed off the cliff of the housing market.

While recently there have been more research devoted to the study of demographic effects of housing, research so far has largely based on aggregate data at the state level or the metropolitan level. Household formation is an individual level decision. Using household level data are likely to provide important details into the relative importance of household formation to the homeownership rates.

Scope

The paper attempts to examine the extent to which the declines in household formation contribute to the increases in homeownership rates, identifying the most vulnerable groups in time of growing affordability problem. After a summary description, we present a detailed analysis of trends in the 100 most populated metropolitan areas. Models are estimated with controls for several sets of socioeconomic and demographic factors, and metropolitan contexts.

Data

The study combines data from several sources, most of which are derived from the decennial censuses Public Use Microdata Samples in both 1990 and 2000. Summary file data from the census are available for more specifically defined geographic areas than is possible for the microdata files. This permits more accurate definition of comparable geographic areas for purposes of trend analysis.

These demographic data are then supplemented by contextual data for each metropolitan area. Personal income and employment trends are taken from the regional economic and income system (REIS) database provided by the Bureau of Economic Analysis (Bureau of Economic Analysis 2003). Housing prices are provided by Office of Federal Housing Enterprise Oversight's Housing Price Index (HPI) (Office of Federal Housing Enterprise Oversight 2001). Housing construction trends are taken from the Census Bureau C-40 reports (U.S. Census Bureau 2003).

Geographic Areas

Detailed analysis focuses on the 100 most populous metropolitan areas. The metro areas are defined according to the geographic definitions used in the 2000 census. The areas are comprised of one or more whole counties, with the exception of New England where metro areas are built from aggregations of townships. Data from the 1990 census is re-arranged to conform to these 2000 definitions. For this study we do not use primary metropolitan statistical areas that are subsets of the larger consolidated metropolitan statistical areas. Instead, we use the whole CMSA as a unit. Thus, our set of 100 largest metropolitan areas consists of both CMSAs and freestanding MSAs.

Sample

The sample for analysis is the household samples in the 100 most populated metropolitan areas, as defined above. We pool the data from 1990 and 2000. Separate analyses will be conducted in two individual age groups (25-34 and 35-44), which are the primary age of household formation and attaining homeownership. The model will also be separately estimated by race and Hispanic origin group, because the changing demographic mix could cause homeownership rates to decline even if each group was achieving at a higher rate than before. Each of these alternative stratifications defines a target group whose homeownership is analyzed in sample observations of the 100

metropolitan areas.

Methods

Metropolitan areas have different rates of homeownership and household formation. Although many households have achieved homeownership by age 25-34, including wealthier households and those for whom access to homeownership is easiest, 25-34 and 35-44 are two pivotal age ranges in which homeownership is added by those who are slower to achieve this status. 25-34 and 35-44 are also primary age ranges of household formation. After age 35-44 the accumulation of homeowner status and the formation of new household slow and begin to level off. Accordingly, our analysis estimates homeownership propensity at age 25-34 and 35-44 in both 1990 and 2000, controlling for key contextual factors prevailing in each market area.

Multivariate model is used to estimate household tenure choice in a pooled sample include concerned households in both 1990 and 2000. The levels of household formation by metropolitan areas in both years are included in the model as contextual variables. The purpose is to investigate the extent to which the changes in household formation impact homeownership attainment in respective metropolitan areas.

Controlled variables include socioeconomic status, human capital, immigrant status, and contextual variables.

Simulation will be subsequently performed to quantify the effects of declining

household formation to the homeownership rates between 1990 and 2000.

Expected Findings

We expect to find: Demographic factors play an important role in the housing market. Household formation is pertinent to homeownership attainment. The demographic effect of housing appears to be very significant in the 1990s, a decade saw both rising homeownership and escalating affordability problems.

The effect of declining household formation is most evident among adults under age 35, adults of lower educational attainment or income level, minorities, and recent immigrants. While large differences exist across metropolitan areas, the impacts are most evident in metropolitan areas that received a large number of in-migrants, and where housing construction lag behind employment growth and population growth. The drop in household formation is reflective of both affordability problems and voluntary changes in household structure.

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