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A Renter or Homeowner Nation?

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A Renter or Homeowner Nation?

Abstract

Between the 1940s and the 1960s, the U.S. homeownership rate increased by nearly 20 percentage points, from mid-40 to mid-60 percent. The self-amortizing 30-year, fixed-rate mortgage, introduced by the Federal Housing Administration/Veterans Administration (VA—now the U.S. Department of Veterans Affairs) transformed the United States from a nation of renters to a nation of homeowners (Acolin and Wachter, 2015; Fetter, 2013).

Disciplines

Finance and Financial Management

A Renter or Homeowner Nation?

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Between the 1940s and the 1960s, the U.S. homeownership rate increased by nearly 20 percentage points, from mid-40 to mid-60 percent. The self-amortizing 30-year, fixed-rate mortgage, introduced by the Federal Housing Administration/Veterans Administration (VA—now the U.S. Department of Veterans Affairs) transformed the United States from a nation of renters to a nation of homeowners (Acolin and Wachter, 2015; Fetter, 2013).

For three decades, from the mid-1960s through the mid-1990s, the homeownership rate remained stable, at around 64 percent (U.S. Census Bureau, 2015a), until recent volatility. Although aggregate homeownership rates were remarkably steady, so were gaps across demographic groups. The “majority-minority” gap is about 20 percentage points (U.S. Census Bureau, 2015a). The persistence of this gap has important consequences for the national homeownership rate in the future, because the United States is expected to become a majority-minority nation in the next 20 years.¹

In this article, we look back to explain the decades of homeownership stability and ask whether, after housing markets complete their recovery from the excesses of the housing market expansion and collapse, we will return to the post-WWII normal in which nearly two out of three households own or whether homeownership is likely to continue its postrecession fall over the coming decades, with an end result that we are no longer a nation of homeowners.

To be specific, this article addresses this proposition: “By 2050 the U.S. homeownership rate... will have fallen at least 20 percentage points.” If this proposition is true, it will mean that within less than 40 years, the United States will transform once again, this time from a nation of homeowners to a nation of renters. Is this scenario possible? Is it likely? To address these questions, we undertake a forecasting exercise based on demographic predictions of the composition of U.S. households. In two separate scenarios, we assume the persistence of rents and prices and the lending conditions of 1990 to 2000 and 2000 to 2010, and we then assume a scenario of rising rents

¹ Based on census projections (U.S. Census Bureau, 2015d).

and prices to capture the possible impacts on homeownership of more recent trends in housing costs that may persist going forward. While it is not our base case, a set of circumstances exists under which the homeownership rate could fall below 50 percent.

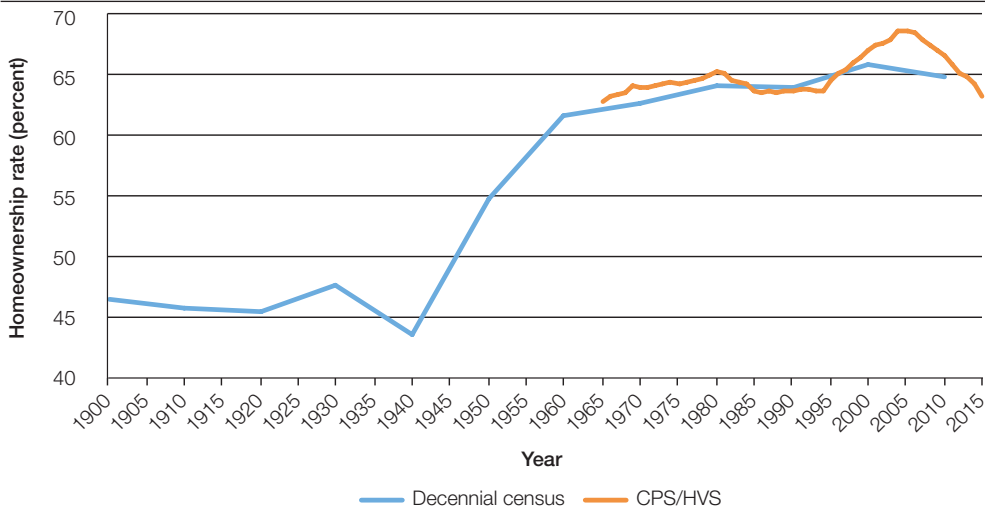
The first section of this article reviews the literature on recent historical trends in the homeownership rate in aggregate and by region and demographic category. The second section describes baseline scenarios for homeownership, starting with a framework put forth by Goodman, Pendall, and Zhu (2015) and developing that to forecast homeownership to 2050. The third section discusses how rising rent trends may affect the base cases. A final section concludes.

Historical Changes in Homeownership, by Region and Demographic Group

After increasing from 44 to 62 percent between 1940 and 1960, the homeownership rate remained relatively stable through the 1990s (exhibit 1).² It then increased from 64 to 69 percent between 1994 and 2004 and maintained that level until 2006 and fell back to 64 percent in 2009, declining to 63.4 percent in 2015.³ Both periods of stability and volatility are the outcomes of multiple and

Exhibit 1

Homeownership Rate, U.S. Decennial Census (1900–2010) Versus CPS/HVS (1965–Q2 2015)



CPS = Current Population Survey. HVS = Housing Vacancy Survey. Q2 = second quarter.
Sources: U.S. Census Bureau (2015a, 2015b)

² These figures are based on data from the U.S. Census Bureau's decennial census.

³ These figures are based on data from the Census Bureau's Housing Vacancies and Homeownership Survey. The survey provides quarterly and annual estimates of the housing stock by tenure, region, income, and minority status. The series goes back to 1965 (1994 for the estimates by income, race, and ethnicity). Despite the large sample size for this survey, results differ from those obtained using the Census Bureau's decennial census and American Community Survey (ACS) data shown in exhibit 1. For the projections, we use the decennial census and ACS data.

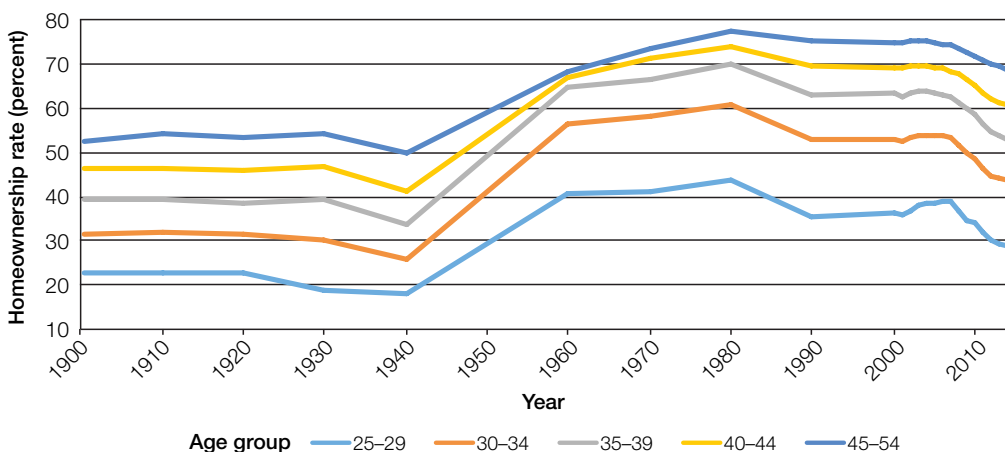
diverging demographic and economic forces. The literature on homeownership emphasizes both the role of demographic changes that occur over the long run and of market forces that can result in relatively fast adjustments (Fetter, 2013; Gabriel and Rosenthal, 2005, 2015; Goodman, Pendall, and Zhu, 2015; Green, 1996).

Fetter (2013) provided evidence of the role of changes in the mortgage market in the rise in homeownership rate that occurred in the post-WWII period. This increase took place in part through households' accessing homeownership earlier in the lifecycle (exhibit 2) as shown by the shift from a linear to a concave relationship between age and the homeownership rate during that period. An important contributor was the home loans benefits given to WWII and Korean War veterans, broadening the potential homeowner base. Structural changes in the mortgage market implemented in response to the Great Depression also contributed through the newly available fixed-rate, long-term mortgage with a downpayment of 20 percent. Fetter (2013) estimated that about one-half of the increase in homeownership in the post-WWII period can be directly attributed to changes in the mortgage market. The remainder of the increase is attributed to increasing income, favorable age structure, and earlier household formation, which itself may be due to policy shifts, along with declining transportation costs that expanded access to newly formed suburbs (Baum-Snow, 2007).

The stability of the homeownership rate between the mid-1960s and the mid-1990s has received limited attention. Nonetheless, the literature is clear on the factors that determine the underlying demand for housing and homeownership. The demand for housing services is determined by socio-economic characteristics, such as income (determined in part by skills), age, and household size, with which households are "endowed." After the level of demand for housing services is determined, the user cost of owning relative to renting (Goodman, 1988; Henderson and Ioannides, 1983) provides a

Exhibit 2

Homeownership Rate by Age Group, U.S. Decennial Census and American Community Survey (1900–2014)



Sources: 1900–2000 decennial censuses (excluding census data on homeownership for 1950, which are not available); American Community Survey 2001 through 2014, extracted from Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. 2010. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota.

framework to analyze tenure choice. Equilibrium in the housing market is reached when the marginal household is indifferent between owning and renting, requiring the cost of obtaining housing services through either tenure to be equal. In addition, for households, the decision to own or rent is affected by household characteristics and, importantly, expected mobility, because moving and transaction costs are higher for owners than for renters. Borrowing constraints also affect tenure outcomes if they delay or prevent access to homeownership (Linneman and Wachter, 1989).

Offsetting demographic and market forces explain the relative stability of the homeownership rate from the 1960s to 1980s. The increase from 62 to 65.5 percent during the 1970s was due in part to demographics (the entry of the Baby Boomers and the increase in the younger-than-35 age group from 23.5 to 31.2 percent of household heads). In addition, high inflation in this period was accompanied by lower real mortgage rates, with the result that homeownership rates increased somewhat across all age groups.⁴ This increase was followed in the 1980s by decreases in the aggregate and age-specific homeownership rates when mortgage interest rates increased and wage growth slowed among low- to moderate-income first-time homebuyers (Wachter, 1990).

Homeownership rates started increasing again in the late 1990s. Gabriel and Rosenthal (2005) analyzed the drivers of this increase with probit models of homeownership, taking into account the existence of borrowing constraints (through self-reported answers on ability to obtain credit). Given the relative stability in borrowing constraints, they found that socioeconomic changes rather than housing market changes are the main reason for the growth in homeownership in the late 1990s, with changes in individual demographic and economic attributes predicting a 4.5-percentage-point increase in homeownership between 1989 and 2001, from 63.0 to 67.5 percent. By contrast, Gabriel and Rosenthal (2015) examined the change in homeownership rate in 2000, 2005 and 2009. They found that changes in headship rates and access to homeownership among young households drove the changes in homeownership during that period, contrary to their finding for the previous decade (Gabriel and Rosenthal, 2005). This finding is consistent with results in Barakova, Calem, and Wachter (2014), which show the impact of the loosening of credit constraints from 2004 to 2007. It is also consistent with findings of a positive relationship between the supply of nontraditional mortgages and homeownership during the housing boom, particularly in areas with a concentration of younger households (Acolin et al., 2015a). Recent work (Acolin et al., 2015b) estimates the impact of the tightening of credit in the aftermath of the housing bust. Findings indicate that the tightening in mortgage credit have played a substantial role in the recent decline in homeownership.⁵

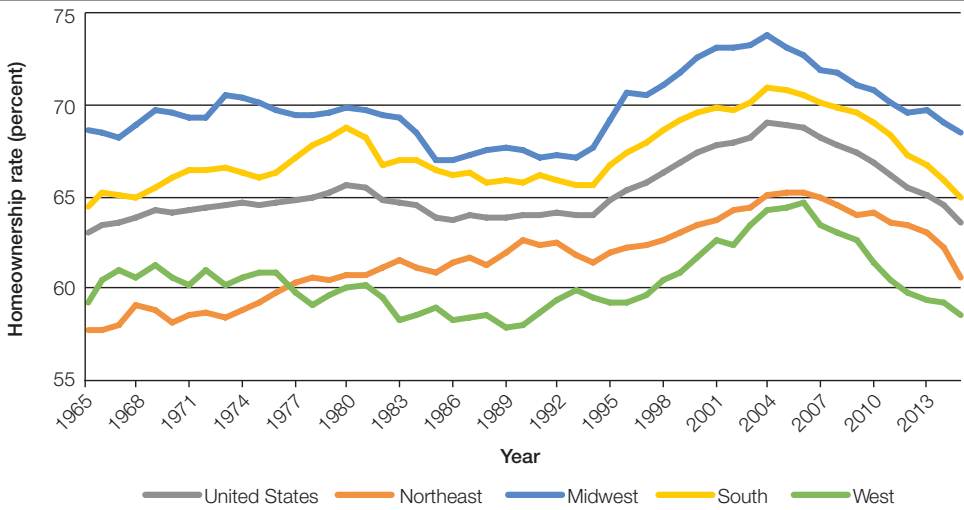
⁴ Regulated deposit rates effectively lowered mortgage interest rates through the 1970s while also causing periods of financial disintermediation (Green, 1996; Wachter, 1990).

⁵ Between 2007 and 2014, the United States added 5.9 million new renter households but lost 0.7 million owner households (U.S. Census Bureau, 2015a). The increase in the number of renter households is formed from new households and former homeowners who lost their houses in foreclosures. It is estimated that, between 2007 and 2014, in the aftermath of the housing bust, in addition to borrowers having difficulty in obtaining credit, 7.5 million borrowers' mortgages (both owner-occupiers and investors) were liquidated (HOPE NOW, 2015), which contributed to the decline in homeownership through a forced transition to rentership for these borrowers who were owner-occupiers. Given the impact of going through a distressed sale or a foreclosure on their credit scores and on their savings, many of these borrowers likely will not be able to obtain credit to repurchase a home for a number of years (Brevoort and Cooper, 2013). As shown in Goodman, Pendall, and Zhu (2015), these forced transitions essentially moved rates more quickly to the lower levels that prevail as of today, with declines forecast to continue. In addition, household formation rates declined during the crisis, resulting in an estimated 2.4 million households not forming by 2013 (Kolko, 2013).

Despite these changes in the overall homeownership rate during the past two decades, two types of variations have remained relatively stable and have implications for the future of the U.S. homeownership rate: wide regional differences (exhibit 3) and large homeownership gaps between minority and majority households (exhibit 4), with homeownership rates for White households at 72 percent compared with 45 percent for Hispanic and 43 percent for Black households as of 2015.

Exhibit 3

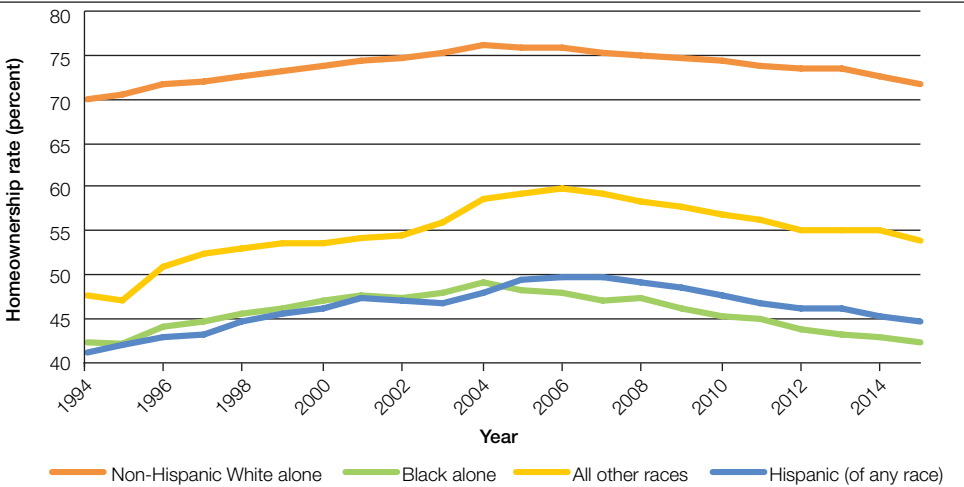
Homeownership Rate, United States and by Region, 1965–Q2 2015



Q2 = second quarter.
Source: U.S. Census Bureau (2015a)

Exhibit 4

Homeownership Rate, by Race and Ethnicity, 1994–Q2 2015



Q2 = second quarter.
Source: U.S. Census Bureau (2015a)

The Midwest and South have persistently higher levels of homeownership than the Northeast and West, with the homeownership rate in the Midwest exceeding that of the West by more than 10 percentage points. Across states, homeownership rates range from lows of mid-50 percent in New York and California to highs of mid-70 percent in states of the Midwest and South.

These differences point to the role of housing market conditions and also to demographics in homeownership outcomes. If the U.S. housing market is to become more similar to the West rather than to the South in terms of housing costs and demographics, the homeownership rate would be expected to decrease further.⁶

The homeownership gap between White and minority households is another feature of the U.S. housing market that has experienced limited changes during the past two decades. The homeownership gap between White households and Black and Hispanic households remains at more than 20 percentage points. Using 1989 data, Wachter and Megbolugbe (1992) estimated that about 80 percent of the gap between White households and Black and Hispanic households can be explained by differences in endowment (including differences in income, education, age, gender, and family type). Gabriel and Rosenthal (2005) found relatively constant compositional differences over time.⁷

In summary, the decades since the 1960s have seen a stable homeownership rate in the aggregate and across demographic groups, until recently. The recent increase and decrease have brought us back to the homeownership rate of the 1960s. The question is whether this rate heralds a new period of stability or whether fundamental forces are at work that will drive homeownership lower in the long term.

The Future of Homeownership

When examining the 15-year period from now to 2030, Goodman, Pendall, and Zhu (2015) predicted a decreasing U.S. homeownership rate to 61 percent. We extend this methodology based on demographic forecasts to 2050 and estimate further declines. The methodology that we use is based on historical decennial census data and projected population by age, race, and ethnicity provided by the U.S. Census Bureau. We capture the potential impact of differing borrowing constraint regimes based on recent headship and homeownership transition rates. Changes in the headship rate and homeownership rate by racial/ethnic and age groups combined enable us to predict the overall homeownership rate based on individual group population projections. We model lending and economic conditions based on two scenarios: (1) a slow transition scenario to headship and homeownership is calculated using the transition rates for 2000 to 2010, while (2) the fast scenario is

⁶ Coulson (2002) estimated the impact of differences in housing market characteristics (housing value to rent, density, vacancy, share of the population living in suburbs) and socioeconomic characteristics (income, household type, educational attainment, number of children, race and ethnicity, immigration status) in explaining the difference in the homeownership rate across these four regions—Midwest, South, Northeast, West—and across states.

⁷ Gabriel and Rosenthal (2005) estimated that differences in credit constraints account for about 5 percentage points of the homeownership gap for Black households and are nearly nonexistent for Hispanic households. Gyourko, Linneman, and Wachter (1999) also found that compositional differences explain a large share of the homeownership gap but that differences reappear when differences in location between White and minority households within metropolitan regions are taken into account.

calculated using the transition rates based on the average of the 1990-to-2000 and 2000-to-2010 transition rates. The slow scenario assumes the continuation of the relative difficulty of young households attaining homeownership in the decade of 2000 to 2010, while the fast scenario uses the average of the past two decades, which includes the 1990 to 2000 decade, in which transitions to headship and homeownership were faster (Goodman, Pendall, and Zhu, 2015). These two scenarios reflect different credit conditions resulting from lending practices and economic circumstances that particularly affect the transitions of young households.

Headship and homeownership figures are estimated for nine age groups (each decade from 15 to 24 through 75 to 84, and 85+) and four racial/ethnic groups (White non-Hispanic, Black non-Hispanic, other non-Hispanic, and Hispanic), using the census population projections (U.S. Census Bureau, 2015c). In summary, the projected age- and race-specific headship and homeownership rates from 2020 to 2050 are calculated using the following formula.

$$Y_{arst} = Y_{arst-1} + Transition_{ars},$$

with Y being the homeownership or headship rate for age group a of group r in scenario s (fast or slow) in decade t (2020, 2030, 2040, and 2050) and $Transition$ being the change in the headship rate for a cohort of a given subgroup between 2000 and 2010 or the average of that transition rate between 1990 to 2000 and 2000 to 2010. The predicted headship rates for each subgroup and scenario in a given decade, Y_{arst} , are then multiplied by the census population projections for each subgroup, X_{art} , to estimate the projected number of households by subgroup, scenario, and decade. These estimates are then used as weights to estimate the overall homeownership rate by scenario and decade.

The slow scenario (exhibit 5) predicts that the homeownership rate will decline 4.8 percentage points between 2010 and 2030 (from 65.1 to 60.3 percent) and the fast scenario predicts the rate will decline 2.9 percentage points (to 62.2 percent), with the average scenario predicting the rate will decline 3.85 percentage points (from 65.1 to 61.25 percent). This projected decline

Exhibit 5

Historical and Projected Homeownership Rates, 1990–2050

	Historical (%)	Projected Scenarios (%)								
		National Scenario			California Scenario			National-California Average		
		Average	Slow	Fast	Average	Slow	Fast	Average	Slow	Fast
1990	65.3	—	—	—	—	—	—	—	—	—
2000	66.2	—	—	—	—	—	—	—	—	—
2010	65.1	—	—	—	—	—	—	—	—	—
2020	—	62.7	62.3	63.0	55.2	54.9	55.6	59.0	58.6	59.3
2030	—	61.3	60.3	62.2	53.6	52.5	54.6	57.5	56.4	58.4
2040	—	59.3	57.1	61.4	51.8	50.0	53.5	55.6	53.6	57.5
2050	—	57.9	54.8	60.9	50.2	47.7	52.6	54.1	51.3	56.8

Sources: 1990–2010 decennial censuses; 2010–2013 American Community Survey extracted from Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. 2010. *Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]*. Minneapolis: University of Minnesota

is driven by a decline in homeownership for most racial/ethnic and age groups, particularly for younger households. It is accentuated by the projected increase in diversity as the homeownership gap remains large, even when considering that the Hispanic homeownership rate is expected to increase slightly in both slow and fast scenarios. These effects more than offset the positive effects on homeownership of an aging population.

Applying this methodology to 2050, the homeownership rate is predicted to decline to 57.9 percent in the average scenario (a 7.2-percentage-point decline from the 2010 level). This prediction is based on the average of a decline to 55 percent by 2050 in the slow scenario, in which the transition rate into household formation and homeownership access remains similar to what has been observed from 2000 to 2010 and a decline to 61 percent in the fast scenario based on the average of the transitions from 1990 to 2000 and from 2000 to 2010 (exhibit 5). Although not insignificant, these projected declines are not consistent with estimates of a 20-percent decline.

Substantial uncertainty surrounds both the census population projection to 2050 and the projection of the headship and homeownership rates for specific groups. The methodology developed by Goodman, Pendall, and Zhu (2015), however, provides some sense of what the homeownership rate might be, based on projected demographic changes and recent historical trends in transition rates from renting to owning that reflect lending condition. These or similar scenarios would play out if, for a given age and racial subgroup, households have similar outcomes in the future as they have had in either the past 10 or 20 years.

One risk to this outcome is an increase in rental and housing costs relative to income. While rents and house price increases historically have tracked inflation, more recently they have exceeded both inflation and median income. Commentary on the likelihood that rents and house prices in the future may increase, relative to inflation and income, points to increases in supply inelasticity in many housing markets as a potential cause for these shifts.

A possible way to incorporate the effect of potential changes beyond variations in demographic and transition rates is to find a case that can serve as a counterfactual if the United States evolves to have consistently more expensive housing costs (both rental and owner) relative to income as a result of increasing housing supply inelasticity. In such a scenario, the homeownership rate is expected to be significantly depressed, because households would be less able to accumulate the downpayment needed to become homeowners.

California today provides an example of what the U.S. housing market might look like in 2050, both in terms of demographics and housing costs if current trends continue over the long run. As of 2010, California's homeownership rate was 55.9 percent, when the U.S. rate was 65.1 percent. Coulson (2002) shows that this low level of homeownership is a function of housing market determinants. The rent-to-income ratio is particularly high in California, where, as of 2010, households spent 33.4 percent of their income on rent on average compared with 29.5 percent nationwide. Also, as of 2010, the median house value in California was \$370,900 compared with \$179,900 nationwide and the median rent was \$1,066 compared with \$713. For the United States to reach California levels, house rent would need to increase 1.2 percent on average in real terms during the next 35 years. For perspective on the possibility of this scenario, during the past 5 years, rental

costs, in fact, increased at an annual rate of 1.2 percent in real terms, while increasing at an annual rate of 0.7 percent since 1981 (ratcheting up in the latter half of the 1990s), according to the Consumer Price Index (Bureau of Labor Statistics, 2015).

In the United States as a whole, household growth has been much more rapid than the construction of new housing units, driving up both rents and home prices. These trends seem likely to continue, at least for the near term. The latest numbers for the 2014-to-2015 period, averaging data from the American Community Survey and the Housing Vacancy Survey, indicate household formation of 1.16 million units. The 2014 starts for private single-family and multifamily units were 1.00 million. If we add to those units government-subsidized housing (100,000 units) and manufactured housing (75,000 units), and if we assume a reasonable obsolescence rate (300,000 units), we find that nearly 300,000 fewer units are being produced than the rate of household formation. Although we do not know whether there has been a long-term sectorial shift in housing supply elasticity, if there has been, there will be significant consequences for homeownership outcomes. The baseline scenario assumes an increase in rents or house prices at historic rates, which have been near zero in real terms over the very long term, but which have increased since the second half of the 1990s. We develop the “California scenario,” assuming that these more recent rent and house price trends continue.

The reduction in discretionary income associated with higher rental costs relative to income observed in California can contribute to the development of a “discouraged renter effect.” Households in metropolitan areas with high incomes, high amenities, and high housing costs (Diamond, 2015) pay a larger share of their income on rental costs, reducing their discretionary income and limiting their ability to save for a downpayment. In addition, these households face high housing prices (and requisite downpayments) if they want to purchase in the location where they work. That is, in order to access the location they value at that point in their life cycle (access to job, consumption amenities), households can either share a dwelling with other family or nonfamily members to limit the share of their income spent on rent and/or save less, taking longer to save for a downpayment. Even if the household accesses one of the low-downpayment programs and can save for that, they may not have the income to qualify for the mortgage at current prices. Thus, the combination of high rental and purchase costs can lead households to remain renters longer, delaying both household formation and homeownership and potentially precluding their ever becoming homeowners. Although California is currently a relative outlier in terms of homeownership, with only the state of New York having a lower homeownership rate, by 2050 the United States is expected to have a similar demographic makeup to the one found in California today. We have taken account of the changes in demographic makeup into our projections, but we have not taken into account a sharp increase in rent-to-income and house price-to-income ratios. If the United States experiences the same housing cost-to-income ratios as California, the nation might reach similar or lower levels of homeownership—what we call the California scenario.

For the California scenario, we combine the California headship and homeownership levels by age and racial groups and its historical transition rates (the same variables used at the national level discussed previously, but for California) with the projected individual population data for the United States to predict the U.S. homeownership rate. In these scenarios, in which the United States experiences headship, homeownership, and transition rates similar to California’s, the national

homeownership rate is projected to decrease to 52.6 percent by 2050 in the fast scenario and to 47.7 percent in the slow scenario. In this case, the United States would be a nation of renters by 2050. Although not a 20-percentage-point decrease from the 2015 homeownership rate, this decrease does represent a more than 20-percentage-point decline from the highs of the early 2000s. Such a scenario would create a drastically different housing landscape in the United States from today's.

Factors That May Affect the Predicted Homeownership Rate

Projection of homeownership rates requires making predictions about the effects of many uncertain parameters. The standard user cost model provides a framework to identify household tenure decision based on maximizing utility, but it still requires making assumptions about the evolution of variables such as the relative price of housing services. In addition, the user cost only partially predicts household decisions, which are also influenced by credit availability.

A number of socioeconomic trends could result in much higher or lower rates of homeownership than those predicted purely based on demographic changes. Positive changes in fundamentals such as income, employment, and mobility could contribute to stabilization or even rebound of the homeownership rate. If income increases faster than it has during the past decades, and particularly if income increases faster than rents and home prices for the marginal buyer, that will increase the demand for housing and homeownership. This scenario, together with financial changes that return borrowing constraints to where they were in the 1990-to-2000 period could contribute to an increase in homeownership rates to rates beyond the predicted level of 61 percent under the fast scenario. The change in the homeownership rate among Hispanic households will be particularly impactful because of their projected contribution to household formation (Goodman, Pendall, and Zhu, 2015). The transition from most Hispanic individuals being foreign born to most being native born has the potential to result in substantially higher homeownership rates among Hispanic households than has been observed in the past (Coulson, 1999) and a higher aggregate homeownership rate. To some extent, this change is captured through the transition rates used for these scenarios, because homeownership rates have already increased for Hispanic households in the last decades, but this increase would accelerate with greater income gains.

Other factors might accentuate the decline of homeownership by contributing to a discouraged renter effect and the realization of the California scenario discussed previously. In the United States, household growth has exceeded the construction of new housing units, driving up both rents and home prices. These trends also may herald a long-term shift away from an elastic housing supply for the United States as a whole. We develop the California scenario to incorporate this long-term outcome. Moreover, the areas that have experienced higher population and job growth are also areas that have experienced a higher increase in housing costs (Diamond, 2015; Moretti, 2012). As central cities, in which homeownership is lower and the stock more adapted to renting, experience a renewal (Capperis, Ellen, and Karfunkel, 2015), we should expect faster population growth rates in cities relative to suburban areas, which, in turn, has the potential to raise housing costs and decrease homeownership rates as well. Regional divergence, with metropolitan areas having high housing costs growing faster than elsewhere, could contribute to a further decline in the homeownership rate. Costs of housing may continue to increase relative to incomes in these

desirable markets, without necessarily reaching California levels. A scenario in which rents increase somewhat faster than inflation, however, is likely. With an increase in supply inelasticity, the outcome is likely to be somewhere in between the slower long-term rent increase and California cost scenarios, an outcome, which as shown in exhibit 5 under the slow scenario, would yield a homeownership rate of roughly 50 percent.

Conclusion

This article performs an exercise in which we identify the potential impact of key drivers of homeownership rates on future homeownership rate outcomes. We take no position on whether these key determinants in fact will come about. Rather we perform an exercise in which we test for their impact.

We demonstrate the result of shifts in three key drivers for homeownership forecasts: demographics (projected from the census), credit conditions (reflected in the fast and slow scenarios), and rents and housing cost increases (based on California). Our base case average scenario forecasts a decrease in homeownership to 57.9 percent by 2050, but alternate simulations show that it is possible for the homeownership rate to decline to around 50 percent by 2050, 20 percentage points less than at its peak in 2004. This projected level of homeownership is not substantially different from the situation experienced by California or a number of high-income European countries today.

To undertake these simulations, we use a methodology based on demographic forecasts, differing credit conditions, and an economic forecast of rising housing costs resulting from supply inelasticity that reflects recent trends. Projected declines in homeownership are about equally due to demographic shifts, continuation of recent credit conditions, and potential rent and house price increases over the long term.

The current and post-WWII normal of two out of three households owning may also be in our future if credit conditions improve, if (as we move to a majority-minority nation) minorities' economic endowments move toward replicating those of majority households, and if recent rent growth relative to income stabilizes. A drop in the homeownership rate to around 50 percent is most likely to occur if increasing housing costs relative to income discourage household saving for downpayments. Limited income growth, constrained credit, and persistent rent and housing cost increases over the long term may result in a new economics of housing and less attainable homeownership.

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References

- Acolin, Arthur, Raphael W. Bostic, Xudong An, and Susan M. Wachter. 2015a. Credit Market Innovations and Sustainable Homeownership: The Case of Non-Traditional Mortgage Products. Working paper. <https://www.stlouisfed.org/~media/Files/PDFs/Community%20Development/Econ%20Mobility/Sessions/BosticPaper508.pdf>.
- Acolin, Arthur, Jesse Bricker, Paul Calem, and Susan M. Wachter. 2015b. Borrowing Constraints and Homeownership. Working paper. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2720313.
- Acolin, Arthur, and Susan Wachter. 2015. "Housing Finance in Retrospect." In *50 Years of HUD: Creating Pathways to Opportunity*. Washington, DC: U.S. Department of Housing and Urban Development: 156–183.
- Barakova, Irina, Paul S. Calem, and Susan M. Wachter. 2014. "Borrowing Constraints During the Housing Bubble," *Journal of Housing Economics* 24 (C): 4–20.
- Baum-Snow, Nathaniel. 2007. "Did Highways Cause Suburbanization?" *The Quarterly Journal of Economics* 122 (2): 775–805.
- Brevoort, Kenneth P., and Cheryl R. Cooper. 2013. "Foreclosure's Wake: The Credit Experiences of Individuals Following Foreclosure," *Real Estate Economics* 41 (4): 747–792.
- Bureau of Labor Statistics (BLS). 2015. "Consumer Price Index Detailed Report: Data for September 2015." <http://www.bls.gov/cpi/cpid1509.pdf>.
- Capperis, Sean, Ingrid Gould Ellen, and Brian Karfunkel. 2015. Renting in America's Largest Cities. Working paper. New York: New York University, Furman Center for Real Estate and Urban Policy.
- Coulson, N. Edward. 2002. "Regional and State Variation in Homeownership Rates: Or if California's Home Prices Were as Low as Pennsylvania's Would Its Ownership Rate Be as High?" *The Journal of Real Estate Finance and Economics* 24 (3): 261–276.
- . 1999. "Why Are Hispanic and Asian-American Homeownership Rates so Low? Immigration and Other Factors," *Journal of Urban Economics* 45 (2): 209–227.
- Diamond, Rebecca. 2015. The Determinants and Welfare Implications of US Workers' Diverging Location Choices by Skill: 1980–2000. Working paper. http://web.stanford.edu/~diamondr/jmp_final_all_files.pdf.
- Fetter, Daniel K. 2013. "How Do Mortgage Subsidies Affect Home Ownership? Evidence From the Mid-Century GI Bills," *American Economic Journal: Economic Policy* 5 (2): 111–147.
- Gabriel, Stuart A., and Stuart S. Rosenthal. 2015. "The Boom, the Bust and the Future of Homeownership," *Real Estate Economics* 43 (2): 334–374.
- . 2005. "Homeownership in the 1980s and 1990s: Aggregate Trends and Racial Gaps," *Journal of Urban Economics* 57 (1): 101–127.

Goodman, Allen C. 1988. "An Econometric Model of Housing Price, Permanent Income, Tenure Choice, and Housing Demand," *Journal of Urban Economics* 23 (3): 327–353.

Goodman, Laurie, Rolf Pendall, and Jun Zhu. 2015. *Headship and Homeownership: What Does the Future Hold?* Washington, DC: Urban Institute. <http://www.urban.org/sites/default/files/2000257-headship-and-homeownership-what-does-the-future-hold.pdf>.

Green, Richard K. 1996. "Should the Stagnant Homeownership Rate Be a Source of Concern?" *Regional Science and Urban Economics* 26 (3): 337–368.

Gyourko, Joseph, Peter Linneman, and Susan Wachter. 1999. "Analyzing the Relationships Among Race, Wealth, and Home Ownership in America," *Journal of Housing Economics* 8 (2): 63–89.

Henderson, J. Vernon, and Yannis M. Ioannides. 1983. "A Model of Housing Tenure Choice," *The American Economic Review* 73 (1): 98–113.

HOPE NOW. 2015. "Data Report." <http://www.hopenow.com/industry-data.php>.

Kolko, Jed. 2013. "Sorry, Mom and Dad: The Kids Aren't Moving Out Yet." <http://www.trulia.com/blog/trends/kids-arent-moving-out-yet/>.

Linneman, Peter, and Susan Wachter. 1989. "The Impacts of Borrowing Constraints on Homeownership," *Real Estate Economics* 17 (4): 389–402.

Moretti, Enrico. 2012. *The New Geography of Jobs*. New York: Houghton Mifflin Harcourt.

Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. 2010. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota.

U.S. Census Bureau. 2015a. "Housing Vacancies and Homeownership (CPS/HVS): Historical Tables." <http://www.census.gov/housing/hvs/data/histtabs.html>.

———. 2015b. "Historical Census of Housing Tables." <http://www.census.gov/hhes/www/housing/census/historic/owner.html>.

———. 2015c. "2014 National Population Projections." <http://www.census.gov/population/projections/data/national/2014.html>.

———. 2015d. "Projections of the Size and Composition of the U.S. Population: 2014 to 2060." <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>.

Wachter, Susan. 1990. "The Limits of the Housing Finance System," *Journal of Housing Research* 1 (1): 163–174.

Wachter, Susan M., and Isaac F. Megbolugbe. 1992. "Impacts of Housing and Mortgage Market Discrimination: Racial and Ethnic Disparities in Homeownership," *Housing Policy Debate* 3 (2): 332–370.

