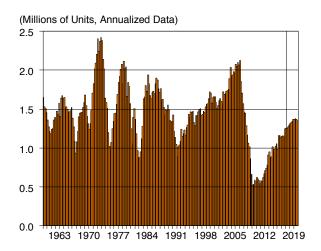
## Housing Activity Grinds Higher

David Shulman Senior Economist, UCLA Anderson Forecast June 2017

In this most unusual of housing cycles, housing starts continue to slowly grind higher as it has since the cyclical bottom in 2009, eight long years ago. (See Figure 1) Further, the recovery remains so tepid that the level of starts remains well below prior peaks and are at what used to be characterized as recession levels. In contrast, prior cycles exhibited very sharp rebounds that approached or surpassed the prior cyclical peak. Although the recovery hasn't been completed, it has certainly been lengthy by historical standards.

Figure 1 Housing Starts, 1959Q1 - 2019Q4F

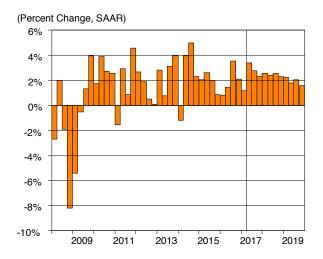


Sources: U.S. Bureau of the Census and UCLA Anderson Forecast

Although we marked up our forecast from last quarter to 1.27 million units in 2017 and 1.34 million units and 1.37 million units in 2018 and 2019, respectively; **that level of activity remains below the 1.4-1.5 million units per year we estimate to be consistent with long-run demand.** The upgrade is the result of the apparent resilience of the housing market to the recent 50 – 75 basis point increase in mortgage rates and lowering our view on the future course of interest rates. The latter is based on our belief that there will be less fiscal stimulus coming from tax reductions that we previously anticipated. Nevertheless, it appears that after an extended period of over-building in the first decade of this century, we continue to be in an extended period of under building.

What makes the under building so puzzling is that it is occurring against a backdrop of modest economic and employment growth and a sustained period of very low mortgage interest rates. (See Figures 2, 3 and 4) Going forward we are forecasting that real GDP will be growing at a 2.4% pace over the next three years, roughly consistent with the recent past. Although not as strong as employment growth, household formations averaged about 1.2 million per year from 2012-2017 and are forecast to accelerate to about 1.5 million in 2018 and 2019 still well above housing starts. (See Figure 5)

Real GDP, Quarterly Data, 2008 - 2019F Figure 2



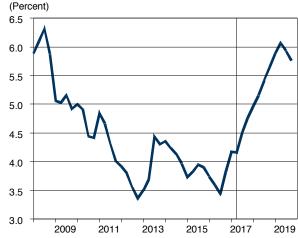
Sources: U.S. Department of Commerce and UCLA Anderson Forecast

6.5 6.0

Quarterly Data

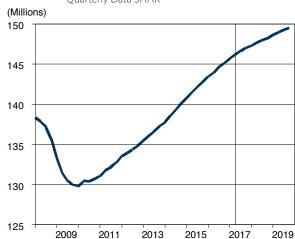
30-Year Fixed Mortgage Rate, 2008 - 2019F,

Figure 4



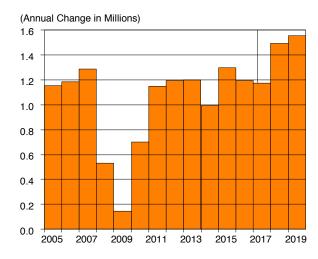
Sources: Federal Reserve Board and UCLA Anderson Forecast

Figure 3 Nonfarm Employment, 2008 -2019F, Quarterly Data SAAR



Sources: U.S. Department of Labor and UCLA Anderson Forecast

Figure 5 Household Formations, 2005 -2019F



Sources: U.S. Bureau of the Census and UCLA Anderson Forecast

However, house prices have rebounded significantly since their nadir in 2012 and are now up 44% and are just 5% below the prior peak in 2006. (See Figure 6) It is therefore no surprise that with limited additions to supply and slowly increasing demand that house prices would make a meaningful recovery. The supply situation is being exacerbated by a growing tendency of existing homeowners to

stay put thereby limiting the supply on the market for entry level homebuyers. 1 As a result, existing home sales remain well below the prior peak of seven million units in 2005 compared to about 5.5 million units this year. (See Figure 7) While homeowners are staying put, they are being active in remodeling their homes resulting in a boom in building materials and gardening equipment sales. (See Figure 8)

<sup>1.</sup> Dougherty, Connor, "A New Normal for Real Estate as Owners Choose to Stay Put." The New York Times, May 15, 2017, p.1

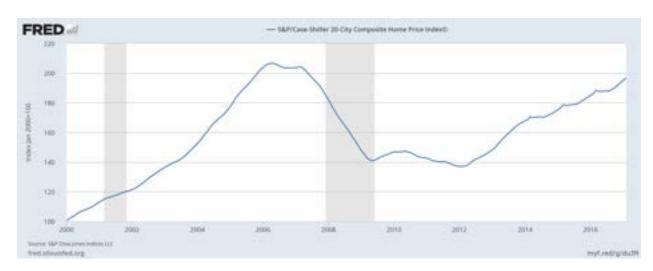
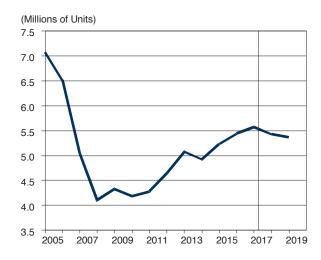


Figure 6 Case-Shiller Home Price Index, 20 City Average, 2000 - Apr 2017, Monthly Data, December 1999=100.

Sources: S&P Dow Jones Indices via Fred





Sources: Nation Association of Realtors and UCLA Anderson Forecast

There are many explanations for the long, slow recovery in housing starts. They range from much tighter credit standards compared to the earlier boom, slow income growth, the "hollowing out" of the middle class and the unwillingness of the millennial generation to make long-term commitments, or at least to delay those commitments. For example, the fertility rate which has been in long-term decline since the early 1960s, declined from 2.12 children per woman at the start of the great recession in 2007 to 1.84 in 2015. (See Figure 9) Of course this decline in fertility has been offset in part by immigration. Another factor in the decline in homeownership has been the development of national single-family home rental businesses that cater to those households who seek a suburban lifestyle, but do not have the ability to purchase a home.

Figure 8 Building Materials and Gardening Equipment Retail Sales, Jan. 2005 - Apr. 2017, Monthly Data, In \$Millions, SA

Sources: Bureau of the Census via FRED



Figure 9 Fertility Rate, 1960 -2015, Number of Children per Woman, 1960-2015, Annual Data

Sources: Bureau of the Census via FRED

Perhaps more insidious are the use of regressive zoning and environmental regulations that reduce the overall supply of housing. This is especially true in the growing employment rich coastal cities where high demand and restricted supply are making housing ever more unaffordable for households earning the median income for their region. It is here where the demand for housing remains unsated.

All of these factors have led to a dramatic decline in the homeownership rate from 69.4% in 2004 to the recent low of 63.2% in 2016. (See Figure 10) It has since modestly rebounded to 63.6%. We have been forecasting the bottom for this series for the past several years to no avail. However, we now believe that homeownership rate has stabilized and will increase modestly from here.

## Multi-Family Housing Booms

The flip side in the decline in the homeownership rate has been a boom in rental housing. **Multi-family hous-**

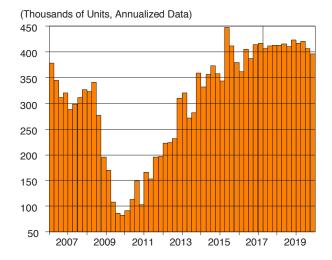
### PRICE OF THE United States

Figure 10 Homeownership Rate, 1980 -2017Q1, Percent, SA

Sources: Bureau of the Census via FRED

ing starts, after crashing during the great recession to 112,000 units in 2009 has surged to 392,000 last year.<sup>2</sup> We are forecasting multi-family starts to run at about a 400,000 unit annual rate over the next three years. (See Figure 11) Although there have been signs of over-building high-end units in New York and San Francisco we still believe that

Figure 11 Multi-Family Housing Starts, 2006 -2019F, Quarterly Data SAAR



Sources: U.S. Department of the Census and UCLA Anderson Forecast

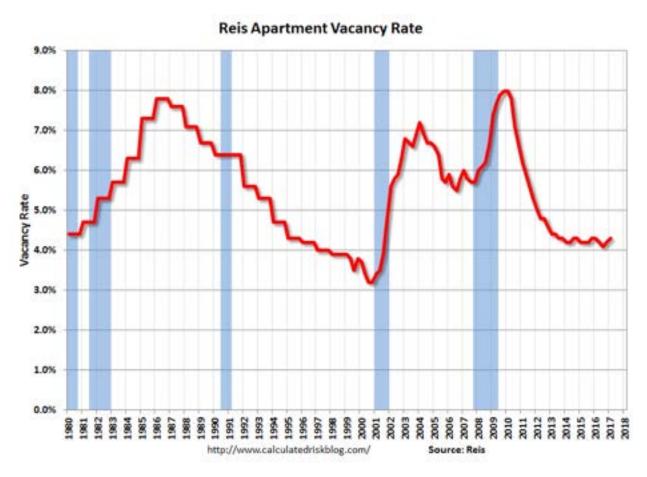
starts will remain at an elevated level as developers shift their focus from high rise urban to more affordable mid-rise suburban product. The apartment developers have, at long last, realized that there is a limited market for \$3500/ month one bedroom apartments.

The boom has been underpinned by households being locked out of the single-family market for credit and income reasons, the preference of millennials for a more urban lifestyle and the delay of marriage and child bearing just to name a few. There has also been an increase in demand for, on the part of the very wealthy, urban condominiums and international buyers seeking EB-5 Visas or a safe haven for their money. Thus in Manhattan, San Francisco and Miami, for example, it is not surprising to see the several floors of unlit apartments at night.

As a result, the apartment vacancy rate has collapsed from 8% at the worst of the recession in 2010 to a low of 4.1% in 2016 and recently, up-ticked to 4.3% (See Figure 12) It is notable that vacancy rate rose in the face of strong demand indicating that supply is now outpacing demand. A casual look at the figure below would indicate that the apartment vacancy rate has bottomed and with continued high levels of new construction the vacancy rate is now on the rise.

<sup>2.</sup> Just to note--our definition of multi-family starts include two or more units in contrast to the standard industry definition of five or more units.

Figure 12 Apartment Vacancy Rate, Quarterly Data, 1980 - 2017Q1



Sources: REIS Reports via Calculatedrisk.blog.com

The market tightness has had its impact on rents. As measured by the Consumer Price Index, rents have recently been rising at a 4% rate, twice the 2% per year increase in the overall price level. (See figure 13) For the first time in a while, we are now witnessing the official rent index run higher than what the public apartment real estate investment trusts (REITs) are reporting. For example, such national apartment owners as, AvalonBay Communities, Camden Property Trust and Mid-America Apartment Communities reported year-over-year-rent increases of 2.6%, 3.1%, 2.9% and 2.9%, respectively. On the other hand, the REITs operating in the single-family rental space reported year-over-year rental gains of 4% in the first quarter according to Zelman Associates.

So why are the official data so much higher than the private data being reported by the REITs? The answer is twofold. First, the REITs operate in the higher-end portion of the market where most of the new supply is coming on and second, the official data is over-weighted towards rent controlled apartments whose rents are not marked to market as often. Thus, the official data tends to lag the spot market data reported by the REITs on the way up and on the way down.

But this gives rise to an obvious question. Why are you still forecasting a robust construction market for multifamily housing? The answer here is also twofold. There is a real demand for affordable condominium units that will be

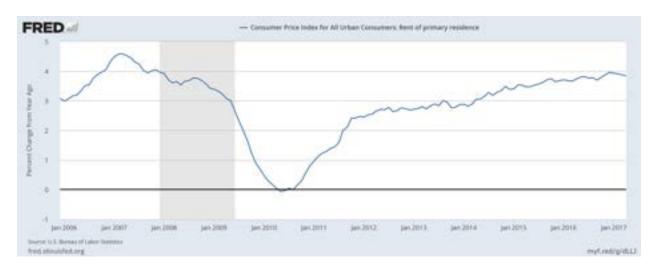


Figure 13 Consumer Price Index for Residential Rent for Primary Residence, Jan. 2006 - Apr. 2017, Percent Change Year Ago, Monthly Data

Source: U.S. bureau of Labor Statistics

met in suburbs and two, there remains a boatload of money still around to invest in real estate. With the fundamentals deteriorating for retail oriented real estate coming from the onslaught of online shopping, there are fewer places for real estate investors to go and much of that money will find its way into apartments. Although it might not be realized, institutional investors are projecting pro forma internal rates of return for Class A apartment buildings of 6-6.5% for a 10-year time horizon, still well above investment grade corporate bonds.

## Conclusion

Housing activity will continue to grind higher with starts increasing from 1.18 million units in 2016 to 1.27 million in 2017 and 1.34 million and 1.37 million units in 2018 and 2019, respectively. Although well above the low .55 million units in 2019, starts remain below what we perceive to be underlying demand of 1.4-1.5 million units and well below the last peak of above 2.0 million units.

Activity is being depressed by higher credit standards, slow income growth, the "hollowing out" of the middle-class, the delay in making commitments on the part of the millennial generation and regressive regulation in growing employment centers on both coasts. The latter is making is making housing unaffordable for households at the median income in those cities.

In contrast to single-family housing, multi-family housing continues to boom as households locked out of the housing market are forced to rent coupled with an increased lifestyle preference for urban living. We forecast multi-family starts to average around 400,000 units a year over the next three years. Although the increases in official consumer price index for rents remain elevated, publicly traded REITs are reporting a slowdown in rent increases for high-end apartments facing competition from new construction. However, the demand for affordable product close to employment centers, both rental and ownership, remains unsated.