

Real Estate Analysis

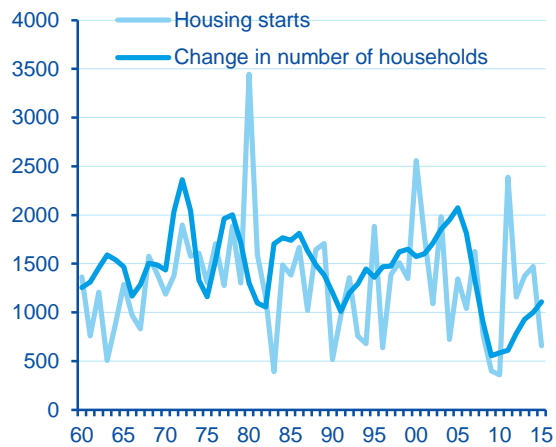
Multifamily vs. single-family housing trends

Filip Blazheski

- Demand for multifamily housing relative to single-family housing has peaked
- Older Millennials forming families will drive the demand for single-family homes
- Demand from younger Millennials will support the multifamily sector
- The demand for multifamily units from downsizing Boomers will intensify

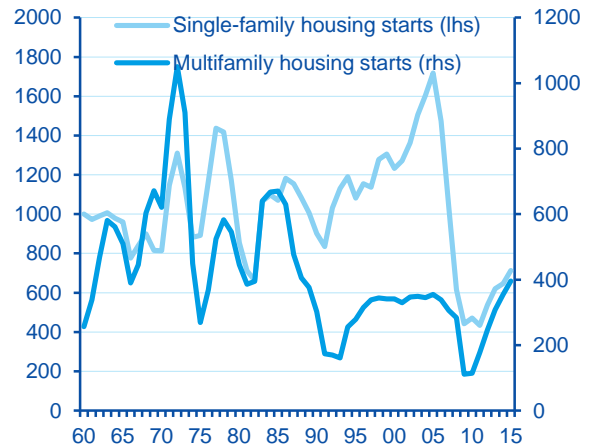
As housing construction and household formation were recovering from the effects of the Great Recession (Chart 1), one of the trends that emerged was the resurgence of multifamily construction (primarily of rental apartments). Multifamily construction is now back in line with single-family construction, after a long hiatus that started in the late 1980s (Chart 2). The demand for rental properties and smaller urban units is going strong, evidenced by the low, albeit increasing vacancy rates due to improved supply. However, if, and for how long, this is going to last is an open question. This brief analyzes the trends that will drive the demand and supply for multifamily and single-family housing over the next 10 years.

Chart 1
Housing starts and households (Thousands, level and YoY change)



Source: Census Bureau & BBVA Research

Chart 2
Housing starts (Thousands)



Source: Census Bureau & BBVA Research

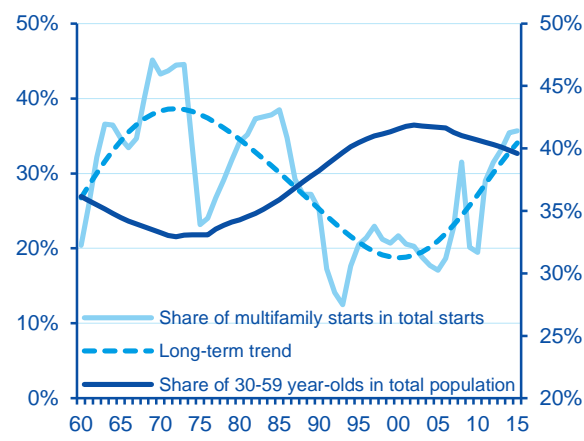
Long-term trends: demographics at play

Multiple factors resulted in a decline in multifamily construction in the second half of the 1980s, such as the adverse effect of the 1986 Tax Reform Act on rental housing construction,¹ relaxed access to credit and government policy stimulating home ownership—primarily of single-family homes. However, the large Baby Boomer generational cohort, which entered the prime age for home ownership during this time, drove the

¹ Poterba, J. (1992). Tax Reform and Housing Market the Late 1980s: Who Knew What, and When Did They Know It? <https://www.bostonfed.org/economic/conf/conf36/conf36g.pdf>

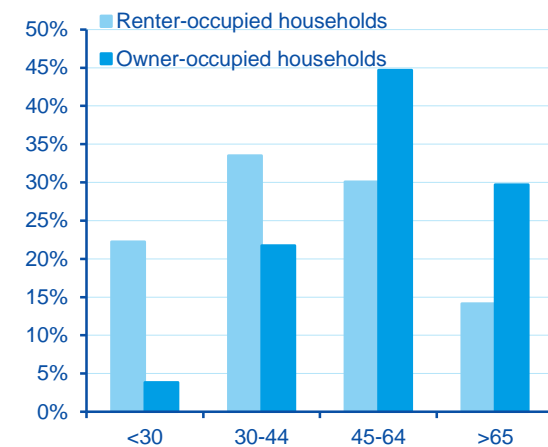
underlying trend. Chart 3 shows how the drop in multifamily housing starts since the mid-1980s was influenced by the disproportionately large cohort of Boomers entering homebuying age, making the demand for single-family houses particularly strong. This is consistent with the lifecycle housing demand model, which states that younger adults have relatively low incomes and space needs, leading them to move more often, rent more, and thereby increase the demand for multifamily units. In the U.S., the transition from renting to owning occurs around the age of 30 (the median age of a first-time buyer in the U.S. in 2013, 2014 and 2015 was 31). As young adults start to form families, they move less and have more space needs and higher incomes, which allows them to purchase single-family homes. For example, in 2015, 89% of buyers with children under the age of 18 purchased detached single-family homes.² Although homeownership rates remain high from this stage into early retirement, during the later stages of life, households begin to exit the single-family housing market because of attrition, moving in with family members, moving to elderly care facilities, or downsizing and relocating to more easy-to-maintain multifamily properties.³ The age at which seniors began downsizing into multifamily units (indicated by a rise in the share of households in multifamily housing by age) gradually rose from 50 in 1980 to 75 in 2013⁴—a trend which is likely to continue. The lifecycle model and the tenure by age of householders (Chart 4) indicate that the demand for single-family homes is strongest for people aged 30-70.

Chart 3
Share of multifamily starts vs. share of population most inclined to buying single-family homes⁵ (%)



Source: Census Bureau & BBVA Research

Chart 4
Tenure by Age of Householder (% of total)



Source: National Multifamily Housing Council & BBVA Research

Today, Baby Boomers (currently age 50 to 70) inhabit 32 million single-family detached homes, which account for more than one quarter of the nation's entire occupied housing inventory.⁶ Therefore, whatever happens to this group will have profound effects on the composition of housing demand. The exit of Boomers from single-family housing will be compensated by the entrance of Millennials (Chart 5). Being a larger cohort than Boomers,

² NAR. First-time Buyers Fall Again in NAR Annual Buyer and Seller Survey. <http://www.realtor.org/news-releases/2015/11/first-time-buyers-fall-again-in-nar-annual-buyer-and-seller-survey>

³ Bitter, C. Krause, A. (2012). Re-urbanism or Bigger 'Burbs?: The Implications of Demographic Change for Housing Markets. <http://realestate.washington.edu/wp-content/uploads/2013/03/Bitter-Krause-PUMS-2012.pdf>

⁴ Rapaport, J. (2015). Millennials, Baby Boomers, and Rebounding Multifamily Home Construction. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2637622

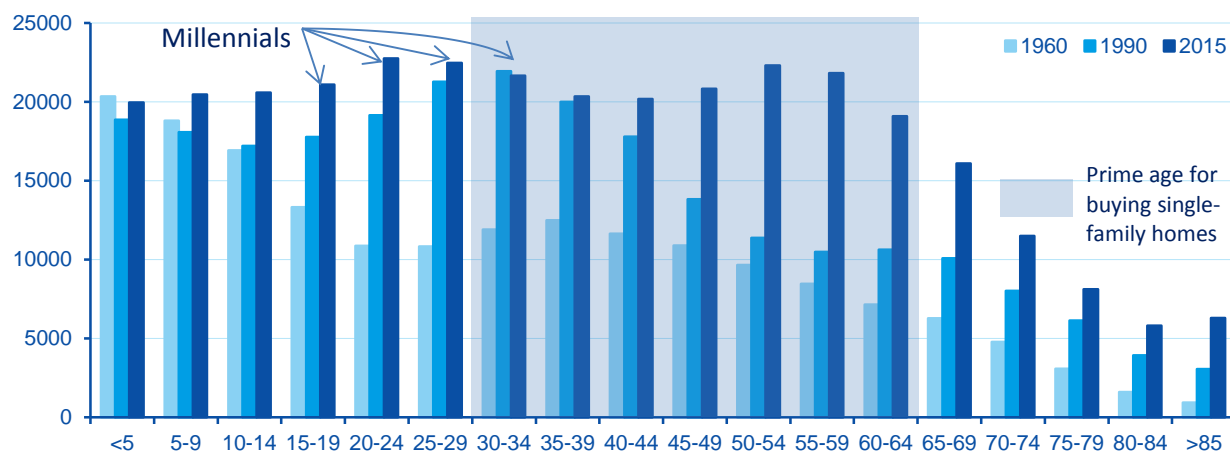
⁵ Trend estimated by using Christiano-Fitzgerald time series filter

⁶ Simmons, P. (2014). Baby Boomer Downsizing Revisited: Boomers Are Not Leaving Their Single-Family Homes for Apartments. <http://www.fanniemae.com/resources/file/research/datanotes/pdf/housing-insights-082015.pdf>

Millennials should have no problem absorbing the freed up inventory of single-family houses in the next 10-15 years. The effect of Boomers on the demand for multifamily homes is more uncertain though, as they have not started significantly downsizing to multifamily properties yet.

Chart 5

Generational shift in the structure of homebuyers: U.S. population by age (Thousands)



Source: Census Bureau & BBVA Research

The post-Millennial generational cohort is considerably smaller than the Millennial cohort; therefore, increasing demand for multifamily properties in the longer run will have to depend on seniors. Luckily for the multifamily sector, the aging Boomer cohort is relatively large, so demand will be supported by its size, even without a change in preferences (i.e. no increase in the share of seniors living in multifamily homes). The transition of Boomers to multifamily properties is weak at the moment,⁷ but won't necessarily remain so. According to the Federal Reserve Bank of Kansas City, "downsizing—once it begins—increases more rapidly with age than in previous decades."⁸

Change in preferences or a reflection of demographic change?

While there is anecdotal evidence of Boomers downsizing to apartments, condos or co-ops, seeking the benefit of convenience and living in more dense communities, there is still no definitive proof for this trend. On the contrary, the share of households living in multifamily units with a head of household aged 70+ has been consistently decreasing since at least the 1980s due to more seniors living longer, with a partner and enjoying better health.⁹ If Boomers' preferences suddenly turned toward multifamily living (assisted living is not an important factor as only a small share of the senior population in multifamily units lives in assisted-living communities), the multifamily sector would reap additional benefits, but even without it, their large number itself ensures a strong influx of multifamily residents going forward.

⁷ See: Simmons P. Baby Boomer Downsizing Revisited: Boomers Are Not Leaving Their Single-Family Homes for Apartments <http://www.fanniemae.com/resources/file/research/datanotes/pdf/housing-insights-082015.pdf>

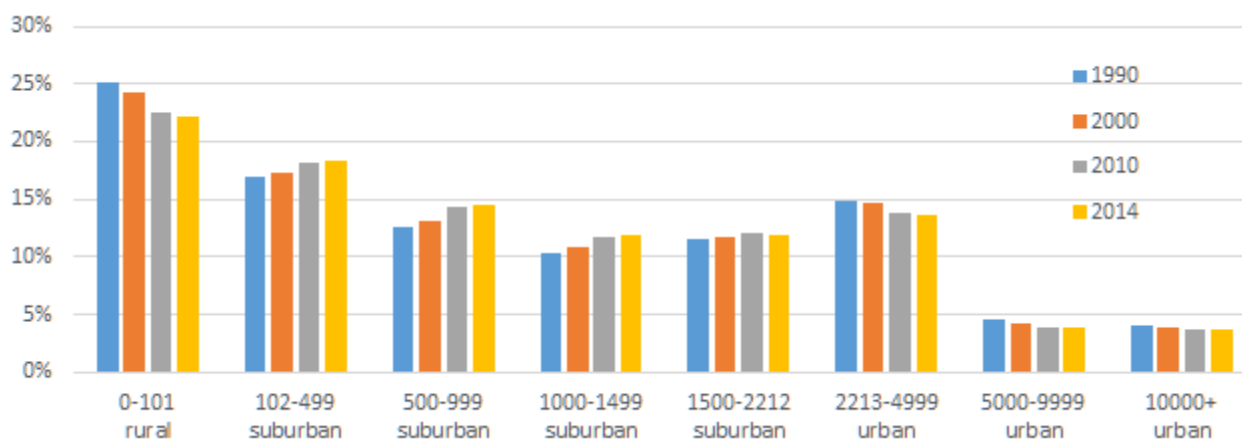
⁸ Rapaport, J. (2015). Millennials, Baby Boomers, and Rebounding Multifamily Home Construction. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2637622

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The primary driver behind the demand for multifamily properties over the last five years, in addition to the effects of the Great Recession, was the Millennial cohort. This is largely because multifamily properties make most sense in densely populated areas, which is where Millennials, most of them in their 20s and early 30s, have preferred to reside. A 2014 report by Nielsen¹⁰ stated, “Millennials (62%) prefer to live in the type of mixed-use communities found in urban centers where they live in close proximity to a mix of shopping, restaurants and offices. They currently live in urban areas at a higher rate than any other generation. And, 40 percent say they would like to live in an urban area in the future.” However, these preferences might just be a reflection of the age of the first wave of Millennials, and thus as Millennials become older and start having children, they may end up behaving similar to previous generations. According to a recent National Association of Realtors (NAR) report, the share of people 35 or younger who are buying homes in urban areas fell to 17 percent at the beginning of 2016, from 21 percent in 2014.¹¹ In fact, the share of Americans living in urban neighborhoods continues to decline (Chart 6). Moreover, the urban revival, evidenced by the process of gentrification in many, until recently, blighted urban cores, is skewed toward “rich, young, educated Whites without school-age kids.”¹² Not only are the suburbs becoming attractive for the majority of Millennials as they age, they could even be moving further away from city centers than generations before them. According to Redfin, the typical home sold in 2015 was about 4 percent farther from a city center than in 2011.¹³

Chart 6

Neighborhood density distribution of U.S. households, 1990-2014 (% of all households, by Census tract density, measured as households per square mile)



Source: Kolko, J. Neighborhood Data Show That U.S. Suburbanization Continues. <http://jedkolko.com/2016/03/25/neighborhood-data-show-that-u-s-suburbanization-continues/>

¹⁰ Nielsen. Millennials: breaking the myths. <http://www.nielsen.com/us/en/insights/reports/2014/millennials-breaking-the-myths.html>

¹¹ NAR. Home Buyer and Seller Generational Trends. <http://www.realtor.org/reports/home-buyer-and-seller-generational-trends>

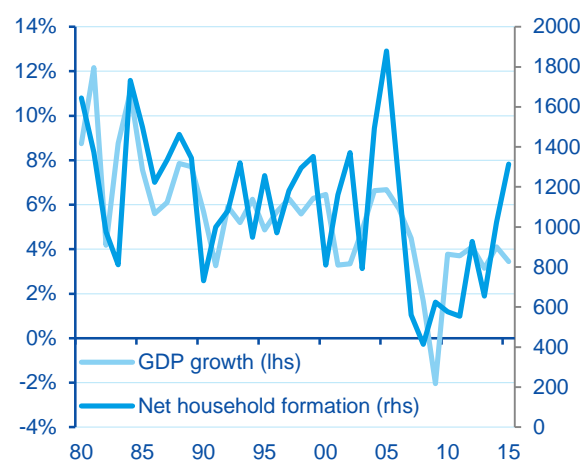
¹² Kolko, J. (2016). Urban Revival? Not For Most Americans <http://jedkolko.com/2016/03/30/urban-revival-not-for-most-americans/>

¹³ Redfin. Homebuyers Are Bucking the Urban Revival As ‘Burbs Beckon <https://www.redfin.com/blog/2016/03/homebuyers-are-bucking-the-urban-revival-as-burbs-beckon.html>

Cyclical and other factors: significant variables, but with a varying importance for the short- to mid-term outlook

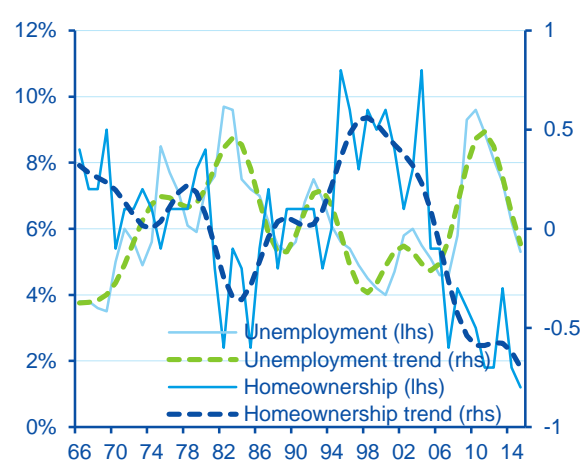
Slow or negative economic growth, not surprisingly, is adversely associated with household formation (Chart 7) and housing starts. Rent vs. buy decisions are also influenced by macroeconomic factors (Chart 8). High unemployment, in particular, delays the transition of younger households from renting to owning.

Chart 7
GDP growth and net household formation (% and thousands)



Source: BEA, Census Bureau & BBVA Research

Chart 8
Unemployment rate and change in homeownership rate (% and p.p. change)



Source: BLS, Census Bureau & BBVA Research

Easy access to mortgages, especially for borrowers with lower creditworthiness, was one of the contributing factors to the housing boom of the 2000s.¹⁴ Many households that would have been renting multifamily units became single-family homeowners, and the multifamily sector was affected by the adverse shift in the risk profile of the remaining renters,¹⁵ leading to higher rents, furthermore depressing the demand for multifamily housing. After the subprime mortgage crisis, the tide turned; a large number of homeowners defaulted on their mortgages and turned to renting, and new regulation was put in place to tighten lending conditions. After this recent experience, there is no reason to believe that we are going to see a return of the loose credit period, even if lending standards continue to relax marginally. On the other hand, credit is not likely to be constrained either, and interest rates are likely to remain below historical average for a considerable period. Because of this, we assume that there will be no significant change in mortgage availability in the short- to mid-term.

Changes in taxes and regulations have had a significant impact on the demand and supply of the different types of housing in the past. For example, making depreciation provisions less favorable and removing anti-tax shelter provisions in the 1980s depressed investment in rental properties,¹⁶ and in the 1990s, the plethora of policies designed to promote homeownership contributed to the formation of the housing bubble of the 2000s. In addition, local zoning rules are known to limit the supply of new housing units, helping to drive up prices.¹⁷ Again,

¹⁴ See Ben Bernanke 2007 speech: <http://www.federalreserve.gov/newsevents/speech/bernanke20070517a.htm>

¹⁵ Ambrose, B. Diop, M. (2014). Spillover Effects of Subprime Mortgage Originations.

<http://www.sciencedirect.com/science/article/pii/S009411901400028X>

¹⁶ Poterba, J. (1992). Tax Reform and Housing Market the Late 1980s: Who Knew What, and When Did They Know It?

<https://www.bostonfed.org/economic/conf/conf36/conf36g.pdf>

¹⁷ Hardaway, R. (2009). The Great American Housing Bubble: Re-examining Cause and Effect.

https://www.udayton.edu/law/resources/documents/law_review/the_great_american_housing_bubble.pdf

as the experience of the latest housing bust is very recent, it is unlikely that new regulation risking the overstimulation of single-family housing development is going to be passed in the mid-term. Also, it does not seem that any potential tax reform is likely to reduce the mortgage interest income deduction or the exemption from capital gains taxation on the sale of a personal residence, which could affect the single-family housing market. Zoning restrictions, being generally in the purview of local governments, are also unlikely to change dramatically, and if they do so, change will happen on a locality-by-locality basis. Therefore, we assume that the tax and regulatory environment will remain relatively unchanged in the coming period.

Student debt has featured prominently in the recent discussions on homeownership. In a survey conducted by NAR recently, 71% of non-homeowners repaying their student loans on time believed that their debt is constraining their ability to purchase a home.¹⁸ However, a more careful examination of the data from multiple sources paints a more nuanced picture. While a recent study finds that a 10 percent increase in student loan debt causes a 1 to 2 percentage point drop in the homeownership rate during the first five years after exiting school,¹⁹ it does not confirm that homeownership after that period is significantly affected. In fact, a recent Brookings report finds that by the time people are in their thirties, home ownership rates for college-educated people that had or didn't have student debt are statistically indistinguishable.²⁰ A recent study based on longitudinal data finds little evidence that student loan debt is a "major culprit" of declining home ownership among young adults, but rather that "it is likely that declining home ownership among young adults—which predates the recent rise in student loan debt—is more responsive to structural changes in the economy and changes in the transition to adulthood".²¹ Because of this, we do not take into consideration changes in student debt levels in our projections.

Last but not least, immigration is a definitive driver of housing markets. According to the Harvard Joint Center for Housing Studies, immigrants accounted for 27.5% of owner household growth over the 1994-2014 period.²² In addition to household formation, there has also been an increase in the homeownership rate among immigrants over the last decades (from 49.8% in 2000 to 52.4% in 2010).²³ This means that if immigration trends continue, the demand for multifamily units in the short-term and for single-family units in the longer-run will remain solid. A major uncertainty regarding immigration trends is the potential of immigration policy reform. However, due to the state of political sentiment, we do not account for any significant changes in immigration forecasts.

Scenario forecasts for the period 2016-2020

Multifamily and single-family housing starts are the closest indicators of the balance of supply and demand for the two types of housing. We project multifamily and single-family housing starts in the 2016-2020 period using Census population projections by age group and BBVA Research USA's baseline macroeconomic forecasts, keeping consumer preferences unchanged. In addition, we assume modest changes in access to credit, tax and

¹⁸ NAR (2016). 71 Percent Believe Student Debt Delays Homeownership. <http://www.realtor.org/news-releases/2016/06/71-percent-believe-student-debt-delays-homeownership>

¹⁹ Mezza et al. (2015). On the Effect of Student Loans on Access to Homeownership. <https://www.federalreserve.gov/econresdata/feds/2016/files/2016010pap.pdf>

²⁰ Dynarski, S. (2016). The dividing line between haves and have-nots in home ownership: Education, not student debt. <http://www.brookings.edu/~media/research/files/reports/2016/05/03-home-ownership-dynarski/home-ownership-final2b.pdf>

²¹ Houle, J. Berger, L. (2015). Is Student Loan Debt Discouraging Home Buying Among Young Adults?.

http://www.appam.org/assets/1/7/Is_Student_Loan_Debt_Discouraging_Home_Buying_Among_Young_Adults.pdf

²² Masnick, G. (2015) 11+ Million Undocumented Immigrants in the U.S. Could Be Important for the Housing Recovery.

<http://housingperspectives.blogspot.com/2015/01/11-million-undocumented-immigrants-in.html>

²³ The Atlantic (2015). Can Immigrants Save the Housing Market. <http://www.theatlantic.com/business/archive/2015/01/can-immigrants-save-the-housing-market/384332/>

housing policy, student debt trends and immigration policy. In addition to the baseline forecasts, the effect of cyclical forces on housing starts is analyzed using two alternative scenarios, upside and downside.

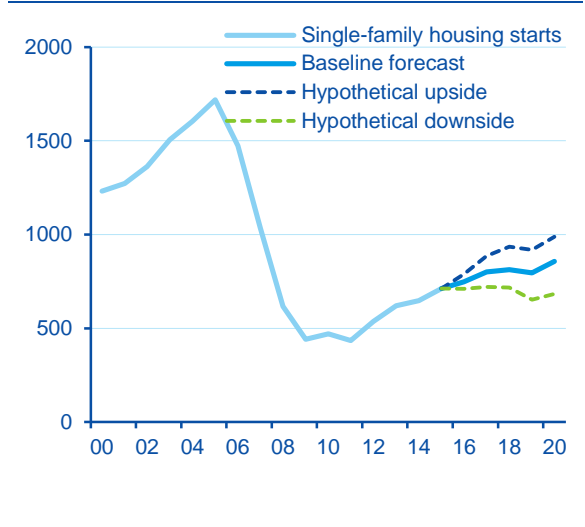
The results for both multifamily and single-family housing starts are presented in Table 1 and Charts 9-11. The forecasts from our models show that multifamily construction remains strong through at least 2020 in response to still solid demand from younger Millennials; however, the share of multifamily construction slows down somewhat relative to single-family construction. The forecasts also show that single-family housing starts are more resilient to a hypothetical downturn than multifamily housing starts.

Table 1
Forecasts: Baseline and hypothetical scenarios

	Single-family housing starts (thousands)	Multifamily housing starts (thousands)	Share of multifamily housing starts (%)
2015	712.7	395.3	37.5
2016	748.0 (b) 789.2 (u) 711.2 (d)	391.5 (b) 424.4 (u) 370.5 (d)	34.4 (b) 34.3 (u) 34.3 (d)
2017	801.4 (b) 885.5 (u) 720.0 (d)	377.5 (b) 435.4 (u) 304.1 (d)	32.0 (b) 32.4 (u) 29.7 (d)
2018	811.9 (b) 934.7 (u) 718.0 (d)	359.1 (b) 439.2 (u) 244.7 (d)	30.7 (b) 31.4 (u) 25.4 (d)
2019	796.3 (b) 917.9 (u) 653.4 (d)	347.5 (b) 421.3 (u) 245.8 (d)	30.4 (b) 30.9 (u) 27.3 (d)
2020	857.0 (b) 988.3 (u) 683.6 (d)	379.5 (b) 446.9 (u) 295.0 (d)	30.7 (b) 30.6 (u) 30.1 (d)

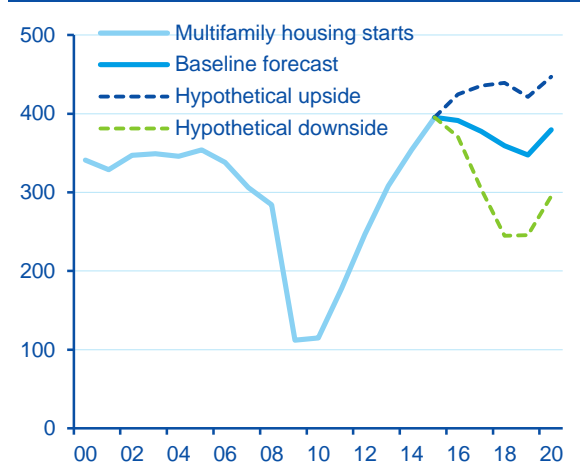
Source: BBVA Research; b=baseline, u=upside & d=downside

Chart 9
Single-family housing starts (Thousands)



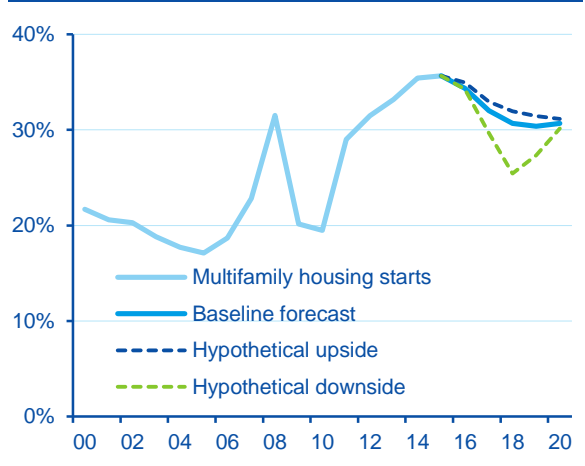
Source: Census Bureau & BBVA Research

Chart 10
Multifamily housing starts (Thousands)



Source: Census Bureau & BBVA Research

Chart 11
Share of multifamily housing starts in total housing starts (%)



Source: Census Bureau & BBVA Research

Bottom line: Solid demand for both single-family and multifamily homes in the short- to mid-term

In the short- to mid-term (through 2020), the demand for both types of properties will remain strong, with demographics shifting towards single-family homes, assuming that the economic environment remains relatively stable and that there are no major policy changes. Older Millennials will drive the demand for single-family homes as they continue to form families. The transition of Boomers to multifamily properties has not started yet. Currently, Boomers are around 50 to 70 years old, and this transition is estimated to start around the age of 75. The transition will take some time as life spans increase and every generation tends to stay longer in their single-family homes than previous ones, and there is no evidence that Boomers' preferences have changed toward multifamily properties. However, when the transition towards multifamily housing starts, it will be significant due to the size of the Boomer cohort. This will be positive for the multifamily sector after 2020, as the post-Millennial generational cohort is relatively smaller.

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