EXECUTIVE SUMMARY

First-time homebuyers represent an important segment of the housing market, generating significant revenue to real estate agents, homebuilders, and the mortgage finance industry. In this report, we adopt the Department of Housing and Urban Development (HUD) definition of first-time homebuyers as homebuyers who did not own a home in any of the prior three years (see page five: Who is a First-Time Homebuyer?). Compared to repeat homebuyers, first-time homebuyers play a more pivotal role in influencing housing inventory and home prices because they represent the shift of housing demand from rental to owner occupancy. Despite this well-recognized dynamic, there has been limited data available on the first-time homebuyer market, starting with market size. In this report, we estimate the size of the first-time homebuyer market going back to 1994 using a combination of government and mortgage industry data—20.1 million actual first-time homebuyers were identified. This data provides a historical perspective on the first-time homebuyer market as well as important recent trends.

Genworth Mortgage Insurance has been helping first-time homebuyers become homeowners since 1981. In 2016, 55 percent of our purchase loans went to first-time homebuyers. The private mortgage insurance industry is the largest provider of private capital for first-time homebuyers, insuring 507,000 of these mortgages in 2016. We understand the first-time homebuyer segment, both the ones we serve and those served by others.

We started working on the First-Time Homebuyer Market Report in 2015. The question was both simple and important: how many homes are sold to first-time homebuyers in a given month? We then raised the bar higher still: by extending the monthly series back to 1994, and reporting the latest data with a minimal lag. Our approach is different from others in that we rely on government reports and industry sources. We believe this is a breakthrough, one that will help the housing industry and policymakers gain insights into the first-time homebuyer market. This report is a testament to our commitment to the first-time homebuyer market.

-Tian Liu
Chief Economist at Genworth Mortgage Insurance
KEY FINDINGS:

1. Between 1994 and 2016, first-time homebuyers purchased on average 1.8 million single-family homes each year, accounting for over one in three of all single-family homes sold, and 45 percent of the purchase mortgages originated.

2. First-time homebuyers have led the housing recovery, contributing over 60 percent of the sales growth in the housing market over the past five years and 85 percent of the growth in the past two years. The resurgence of the first-time homebuyer market has contributed to very tight housing supplies and accelerating home prices, especially at the “low” end of the housing market.

3. During the Housing Crisis, the number of single-family homes sold to first-time homebuyers saw a peak to trough decline of 900,000 units (43 percent) – reaching a trough of just 1.2 million units in 2011. Over the last 10 years, the housing market has seen 3 million fewer first-time homebuyers in aggregate compared to the historical average.

4. The first-time homebuyer market stagnated during the historic housing expansion of the 1990s and early 2000s, leading to a decline in first-time homebuyer mix. Instead, it was repeat homebuyers, including second-home buyers and investors, who led the surge in housing activity.

5. The expansion of government lending programs and the implementation of the first-time homebuyer tax credit provided temporary support to first-time homebuyers. Between 2008 and 2010, first-time homebuyers represented 35 percent of all single-family home sales, which is close to its historical average. However, the percentage of single-family home sales to first-time homebuyers declined once the tax credit expired, and stayed below 30 percent for these three years.

6. First-time homebuyers have always demonstrated a greater need for low down payment mortgage products. Between 1994 and 2016, 73 percent of first-time homebuyers chose such products compared to 30-50 percent for repeat homebuyers. Mortgage products with a lower down payment will likely have a higher first-time homebuyer mix.

7. Private mortgage insurance and FHA (government-backed mortgage insurance) are the two leading products for first-time homebuyers and have together accounted for close to 1 million first-time homebuyers a year since 1994. They have played a key role in reviving the first-time homebuyer market in the current recovery, accounting for approximately 80 percent of its growth in the past two years.

8. First-time homebuyers purchased 2 million single-family homes in 2016, 15 percent more than 2015 - and the most since 2006. During the first quarter of 2017, there were more first-time homebuyers than any other year since 2005. A total of 424,000 single-family homes were sold to first-time homebuyers, up 11 percent from a year ago, and accounting for 38 percent of all single-family home sales.
NEW HOUSING MARKET INSIGHTS FOR THE HOUSING INDUSTRY AND POLICYMAKERS:

The housing market is made up of first-time and repeat homebuyers whose circumstances are very different. Their demand for housing goes up or down at different rates, depending on demographics, economic conditions, and government policies. The current housing market data is not informative about who is driving the overall housing market, making it difficult to come up with the appropriate strategies and policies.

The 3 million missing first-time homebuyers accumulated over the past decade, as well as the Millennials reaching the household formation age will be two likely sources of further growth for the first-time homebuyer market over the next few years, which can push the first-time homebuyer market over 2 million units a year over the next few years. This should generate continued demand for growth in low down payment purchase mortgage lending, and in the demand for single-family homes priced below the median home price. We will likely see faster home price appreciation at the “lower” end of the housing market. This will provide fresh growth opportunities to homebuilders at a time when the high-end market is showing less opportunity for growth.

Policymakers should consider the First-Time Homebuyer Market Report, because it provides guidance as to when the government should play a more active role and when it should retreat because private capital is abundant. The government has historically played an important role in the first-time homebuyer market through loan guaranty programs, which enable low down payment mortgages. This report shows that the first-time homebuyer market has recovered and private capital is pursuing growth in the market, but that the government lending program is still too big. This means that the direct provision of liquidity through government lending programs, such as those sponsored by the FHA, should be a lower priority.

Low down payment mortgages serve a real economic purpose for first-time homebuyers by reducing the down payment threshold to well below 20 percent. At the same time, they can be riskier than standard mortgages. As private sector products expand, the government should pay more attention to alternative products such as the piggyback loans of the last cycle, to make sure that lending remains well disciplined and that pricing is commensurate with risk.
WHO IS A FIRST-TIME HOMEBUYER?

The literal definition of a first-time homebuyer is a homebuyer who is buying for the first time. This is not widely used in the housing and mortgage industry. We use the definition provided by HUD, which is widely used in the industry. It defines a first-time homebuyer as:

- An individual who has had no ownership in a principal residence during the 3-year period ending on the date of purchase of the property. This includes a spouse (if either meets the above test, they are considered first-time homebuyers).
- A single parent who has only owned with a former spouse while married.
- An individual who is a displaced homemaker and has only owned with a spouse.
- An individual who has only owned a principal residence not permanently affixed to a permanent foundation in accordance with applicable regulations.
- An individual who has only owned a property that was not in compliance with state, local or model building codes and which cannot be brought into compliance for less than the cost of constructing a permanent structure.

There are three differences from the literal definition. First, the HUD definition requires a first-time homebuyer to have had no ownership interest in a principal residence only during the previous three years. Homebuyers who have owned a principal residence more than three years ago are counted as first-time homebuyers. Second, the home needs to be the principal residence for the buyer. Investment properties do not count. Third, a homebuyer whose only previous ownership was with an ex-spouse is counted as a first-time homebuyer. While generally broader, the HUD definition provides a good proxy for the first-time homebuyer market, and where it differs from the true market definition, it still captures the same economic impact of first-time homebuyers on the housing market such as absorbing housing inventory, moving from renting to owning, or seeking affordable homes. Critically, this approach provides the best data collection mechanism for measuring the first-time homebuyer market by using data from the mortgage application process.

1 https://archives.hud.gov/offices/hsg/sfh/ref/sfhp3-02.cfm
ESTIMATING THE FIRST-TIME HOMEBUYER MARKET

In this report, we rely on mortgage origination data gathered from government agencies and industry sources, and certain assumptions to estimate the number of first-time homebuyer purchase transactions going back to 1994. We selected 1994 as the beginning period because this is when the U.S. Housing Market Conditions report started covering the number of mortgage insurance certificates, FHA endorsements, and VA guaranties on a monthly basis, giving us data for a large portion of the mortgage loans made to first-time homebuyers. Other data sources include the agency securitization data which identifies first-time homebuyers at the loan level for mortgages securitized by Fannie Mae, Freddie Mac, and Ginnie Mae. We complement that data with more comprehensive data sources such as government reports (from FHA, VA, and USDA) and mortgage insurance industry sources including MICA (Mortgage Insurance Companies of America), and Genworth Mortgage Insurance, which has a long history of providing mortgage insurance on low-down payment mortgages. Together, they provide a longer history and a more comprehensive coverage of the first-time homebuyer market than is possible through the securitization data alone. We also capture first-time homebuyers using other industry sources, such as Inside Mortgage Finance, and government statistics including HMDA (the Home Mortgage Disclosure Act), and the Residential Mortgage Survey to estimate smaller products such as second lien mortgage products and private label securities, which were popular among first-time homebuyers before the 2007-2008 Housing Crisis, but are dormant today. We also use HMDA data, the Residential Mortgage Survey, and government-sponsored enterprise (GSE) data to estimate the overall conventional market and its high down payment segment. Together, government and industry sources provided 20.1 million first-time homebuyer records between 1994 and 2016, accounting for 49 percent of the estimated total number of first-time homebuyers.

Mortgage products are typically classified by who bears the credit (default) risk. The two main categories are government loans and conventional loans. There are four mortgage products that are backed by the U.S. government: FHA loans, VA loans, USDA loans, and Native American loans. Conventional mortgages can be backed by Fannie Mae and Freddie Mac (GSEs), lenders (portfolio loans), or private investors (private label mortgages). When the loan-to-value (LTV) ratio is above 80 percent, before the GSEs can take on credit risk, the borrower must obtain a credit enhancement, of which the most predominant form is private mortgage insurance. Private label mortgages were popular before the Housing Crisis, but due to the spectacular way those structures collapsed during the Crisis, they have been dormant since. Beyond first-lien mortgages, first-time homebuyers can also combine a second-lien mortgage with a primary conventional mortgage that has an LTV ratio of 80 percent or lower to achieve the same effect as a low down payment mortgage, which is known as a combination (or, ‘piggyback’) loan. Piggybacks were widely used by first-time homebuyers before the Housing Crisis, but are far less prevalent today because of poor performance, which led to a reaction by lenders and regulators to base pricing on the combined LTV ratio (CLTV). Our approach is to identify first-time homebuyers in each mortgage product category, including first-time homebuyers with and without mortgage

2 Between 1994 and 2016, an average of 73 percent of first-time homebuyers chose low down payment mortgages. For a detailed discussion, see the section Down Payment Affordability for First-Time Homebuyers.
3 MICA ceased to exist in early 2014 and this data series ended after October 2013. The new industry trade group is “USMI,” which does not collect or report market data.
insurance. This is important because conventional loans with private mortgage insurance, like their government counterparts, capture a disproportionately large share of first-time homebuyers. In addition, as we will show, the private mortgage insurance industry has historically insured high-LTV conventional mortgages that are not backed by the GSEs.

Data from agency and industry sources are more likely to have direct information on first-time homebuyers they serve, tend to be more timely (soon after the end of each month), and have a longer history. Therefore, we rely on these sources when more than one data source is available for a given segment. When direct information on first-time homebuyers is not available, we estimate the number of purchase loans first, and then combine that with estimated first-time homebuyer mix. The key assumption is that similar or competing products have a similar mix of first-time homebuyers, and that some products such as FHA loans have a similar first-time homebuyer mix over time. Estimates of the purchase loan market are available from HMDA, HUD, and Inside Mortgage Finance.

Since September 2013, the release of loan level data for agency loans has significantly improved the data availability for the agency loan market, making it easier to follow the latest trends in the first-time homebuyer market. The GSEs have also released loan level data between the late 1990s and 2016, making the tracking of GSE first-time homebuyers possible. However, the conventional mortgage market has always included a larger set of loans than those backed by the GSEs. Therefore, it is useful to estimate first-time homebuyers who use the non-agency market, such as non-agency conventional and second-lien mortgages. Estimates in these market segments are more uncertain because no first-time homebuyer mix data is available on these mortgages. We discuss the data and assumptions used to estimate first-time homebuyer market and the purchase loan market for each mortgage product in detail in the Appendix.
DIFFERENCES FROM OTHER MEASURES OF THE FIRST-TIME HOMEBUYER MARKET

Today, there are two publicly available measures of the first-time homebuyer market. One is based on a survey of Realtors® conducted by the National Association of Realtors® (NAR), while the other is based on the agency securitization data analyzed by the American Enterprise Institute (AEI). They report first-time homebuyer mix in the housing market (NAR), and in the mortgage market (AEI). Both of these are important efforts to understand the first-time homebuyer market. The monthly report from the NAR started in October 2008, and is based on monthly survey responses of less than 10 percent of 50,000 realtors (typically 3,000-4,000). The AEI’s measure started in April 2013, taking advantage of the agency securitization data that became available. It covers mortgages securitized by Fannie Mae, Freddie Mac, and Ginnie Mae, but does not cover non-securitized mortgages such as those held by lenders, private mortgages, or second-lien mortgages.

In contrast to these two measures, the Genworth First-Time Homebuyer Market Report measures the number of homes sold to first-time homebuyers by month and reports it on a quarterly basis. This allows us to tie the first-time homebuyer market with home sales and purchase loan originations, which is a key advantage. Our series goes back to 1994, which is significantly longer than both the NAR and AEI, which allows users to place today’s market size in the context of the last two housing cycles. This longer time horizon is useful in analyzing housing market trends. Our approach provides an estimate of the first-time homebuyer market in both the agency as well as the non-agency mortgage market, giving an overview of the entire mortgage market. In addition, we separately identify first-time homebuyers enabled by private mortgage insurance from the overall conventional market. By doing so, we provide an estimate of the low down payment mortgage market, which is an important source of credit to first-time homebuyers.

OVERVIEW OF THE FIRST-TIME HOMEBUYER MARKET

The first-time homebuyer market is a large and significant part of the housing market. Based on our estimates, first-time homebuyers have historically purchased an average of 1.8 million single-family homes a year between 1994 and 2016. Sales in the single-family housing market are measured by combining sales of existing (previously-owned) and new homes. Over this period, total home sales have averaged 5.2 million units a year. This means that an average of 35 percent (or just slightly over one in three) of single-family homes sold are bought by first-time homebuyers.

In the mortgage market, an average of 4.2 million loans were originated to finance single-family home purchases each year between 1994 and 2016. First-time homebuyers have accounted for an average of 45 percent of these loans. Our methodology assumes that first-time homebuyers require financing. Therefore, cash buyers are assumed to be repeat homebuyers and not first-time homebuyers. Because of this, the first-time homebuyer concentration is higher in the purchase mortgage market than it is in the housing market.

*Total home sales are composed of existing homes (averaging 4.5 million units a year, or 87 percent of the total) and new homes (averaging 700,000 units a year, or 13 percent of the total).
Another way of saying this is that real estate agents see cash buyers, but not mortgage lenders. Therefore, a smaller percentage of real estate agents’ customers are first-time homebuyers than that of mortgage lenders. The homebuyer profile survey from the National Association of Realtors suggests that among cash buyers, only a smaller percentage (eight percent) were first-time homebuyers in 2016. That means even if we included cash buyers who are buying for the first time, the overall first-time homebuyer mix would only be one point (or 50,000) higher in 2016. As we will show later, down payment affordability is a major hurdle for first-time homebuyers, and that the first-time homebuyer mix moves inversely to the size of the down payment. Even the standard 20 percent down payment poses a financial challenge to most first-time homebuyers, and close to 80 percent of first-time homebuyers put less than a 20 percent down payment toward their home purchase. In practice, the average down payment is likely to be close to or below 10 percent of the property value.
TWO HOUSING CYCLES (1994-2016)

The housing market spanned two housing cycles between 1994 and 2016, which we define as the period between two consecutive peaks in total home sales. The first cycle covers the period between 1994 and 2006, when the housing market saw rising home sales and home values. The second cycle covers the period between 2007 and 2016, marking the housing collapse of 2007 to 2011, and the housing recovery that followed.

The first-time homebuyer market was relatively stagnant during the first housing cycle. First-time homebuyers purchased an average of 2.0 million homes a year. The period between 2001 and 2006 marked a slightly higher level of first-time homebuyer activity. During these six years, an average of 2.1 million homes were sold to first-time homebuyers. The overall housing market, however, saw rapid and consistent growth in home sales. At the beginning of this cycle, home sales averaged 4.2 million units a year for 1994 and 1995. At the peak of the cycle, home sales averaged 7 million units a year during 2003-2007. This means that the housing expansion during the first housing cycle was not driven by first-time homebuyers. In fact, the percentage of home sales going to first-time homebuyers showed a declining trend during the cycle, falling from over 45 percent in 1994 to just over 30 percent in 2006.

The first-time homebuyer market appears to be more sensitive to changing macroeconomic conditions. It contracted during both the 2001 and 2007 recessions. In the lead-up to the 2001 recession, the first-time homebuyer market showed signs of overheating, reporting an average of almost 2.3 million home purchases during 1999 and 2000. During the 2000-01 recession, the first-time homebuyer market declined by 10 percent, while the overall single-family housing market continued to expand. The first-time homebuyer market declined sharply from 2007 to 2011, falling by 43 percent. Many of the credit channels that had been available before the Housing Crisis such as private label mortgages, second-lien mortgages, subprime mortgages, as well as mortgages with low down payment, dried up. The overall macroeconomic conditions were also not conducive to first-time homebuyers. Between 2008 and 2010, the government supported the housing market downturn through a series of first-time homebuyer tax credits. In addition, government loan programs expanded to make credit available. These measures had a temporary impact on the first-time homebuyer segment. The number of first-time homebuyers averaged 1.4 million units between 2008 and 2010. The first-time homebuyer tax credit and a depressed overall housing market combined to drive the percentage of home sales going to first-time homebuyers higher between 2006 (25 percent) and 2008-2010 (35 percent). However, once these tax credits expired, the first-time homebuyer market collapsed—marking a trough in 2011, when fewer than 1.2 million first-time homebuyers purchased homes. This market rebounded moderately in 2012 and 2013, helped by low home prices and low interest rates on mortgages, which made homes much more affordable. In addition, the private mortgage insurance industry began to expand their underwriting guidelines, and new capital entered the market through capital raises by existing players and new entrants.

Strictly speaking, 1994 is not the beginning of the housing cycle. It is the first year for which we have estimated first-time homebuyer market size. The previous housing market trough happened during the 1991 recession, with total single-family home sales of 3.4 million units.
A FIRST-TIME HOMEBUYER RECOVERY

After a lull in 2014, the first-time homebuyer market surged in 2015 and 2016 from under 1.5 million to 2.0 million units, which is the average level from the previous housing cycle. Over the same period, sales of single-family homes expanded by 616,000 units from 4.8 (2014) to 5.4 million units (2016). The surge in the first-time homebuyer market therefore accounted for 85 percent of the expansion in the housing market. The annual increase of approximately 263,000 first-time homebuyers for two years in a row is unprecedented in the period of 1994-2016, and had a large impact on the overall housing market on both inventory and home price appreciation. In 2014, the supply of existing homes for sale had averaged 5.2 months, slightly below the six months of supply that is considered normal. In 2015, supply had declined to 4.8 months. In 2016, supply declined to under 4.4 months, suggesting that housing market conditions have tightened further. In the first four months of 2017, supply has declined below four months. This tight supply condition was accompanied by an acceleration in home price growth. In 2014, home prices increased by 5.4 percent. It accelerated to 5.7 percent in 2015, and to 6.2 percent in 2016. We believe that the surging first-time homebuyer market has played an important role in explaining the tightening housing supply and rising home prices at the same time that home sales were increasing. Unlike repeat homebuyers, first-time homebuyers do not bring another housing unit to the market at the time they are seeking to buy. They represent a shift in housing demand from rental to owner occupancy. Therefore, rising first-time homebuyers in the housing market drain housing inventory and the supply of homes for sale much faster than a similar increase in repeat homebuyers.

**Fig. 3**

Months of Supply of Existing Homes for Sale

<table>
<thead>
<tr>
<th>Month</th>
<th>2014 Avg: 5.2</th>
<th>2015 Avg: 4.8</th>
<th>2016 Avg: 4.4</th>
<th>2017 Avg: 3.7</th>
</tr>
</thead>
</table>

Source: National Association of Realtors
THREE MILLION MISSING FIRST-TIME HOMEBUYERS FROM THE HOUSING BUST

One of the reasons for building a longer time sequence of the first-time homebuyer market is to develop a historical perspective on the cyclical nature of the housing market. Although the first-time homebuyer market is close to the previous peak, the Housing Crisis has left a very large deficit in the first-time homebuyer market. Since 2007, first-time homebuyers have averaged just 1.5 million a year, which is 300,000 fewer than the historical average. Over 10 years, this amounted to three million first-time homebuyers missing from the housing market. Between 2007 and 2015, the number of first-time homebuyers was lower than its historical average every year. This is consistent with the census data showing a 4-5 point increase in the proportion of 18-34 year olds living with their parents⁶, as well as historically low home ownership rates⁷. As economic growth continues, we expect many of these three million missing first-time homebuyers to eventually buy a home, which will be a source of future growth. In turn, first-time homebuyers who purchased in 2015 and later will likely accumulate sufficient home equity over the next five to ten years to fuel the next wave of repeat homebuyers.

---

⁶Data from the Census Bureau’s Current Population Survey, 2005-2014
⁷In 2016, the homeownership rate reached 63.4 percent, which was the lowest level since 1966. It was down 5.6 percentage points from its 2004 peak.
Estimates of the first-time homebuyer market also allow us to identify the repeat homebuyer market, which are home sales not purchased by first-time homebuyers. Americans are constantly on the move in search of better job opportunities, lower cost of living, and better climates and amenities. In addition to this culture of mobility, most first-time homebuyers will accumulate sufficient home equity and other assets as well as gain higher income over their life cycle, enabling them to get into better and more expensive homes. These changes drive the repeat buyer market. As noted earlier, the housing expansion in the 1990s and early 2000s was driven by increased demand from repeat homebuyers (since the first-time homebuyer market was relatively stagnant). Sales to repeat homebuyers rose from under 2.3 million units in 1994 to approximately 5.3 million units a year in 2004-2005. The collapse of the housing market during 2007 and 2008 was driven by a sharp drop in repeat homebuyers. From 2005 to 2011, sales to repeat homebuyers declined from 5.4 million units to 2.6 million units, a decline of 51 percent—far exceeding the decline of 39 percent for the overall housing market during the same period. The recovery of the repeat buyer market has been slow after the Housing Crisis. Over the past five years, the repeat homebuyer market has increased by only 480,000 units. In 2016, the repeat homebuyer market represented 63% of home sales, the lowest level since 2000. American families have not seen the same asset accumulation or income growth in this housing cycle to improve their housing. Alternatively, they may have become less interested in mobility. Regardless, the repeat homebuyer market will be an interesting metric to follow to better understand the financial well-being of American households.

Source: Genworth Mortgage Insurance
2016 AND FIRST QUARTER 2017 TRENDS

The First-Time Homebuyer Market Report is based on the most high-frequency data available (mostly monthly data) and reported on a quarterly basis. This is a significant advantage over other data sources such as those from the Census Bureau and HMDA, which have lags of one year or longer, and are reported on an annual basis. The first-time homebuyer market had its strongest year in 2016 since 2006, reaching 2 million units, and was 15 percent higher over 2015. First-time homebuyers accounted for 37 percent of all single-family homes sold in 2016, up from 34 percent in 2015. During the first quarter of 2017, there were more first-time homebuyers than any other year since 2005. A total of 424,000 single-family homes were sold to first-time homebuyers, up 11 percent from a year ago, and accounting for 38 percent of all single-family home sales.
DOWN PAYMENT AFFORDABILITY FOR FIRST-TIME HOMEBUYERS

Our approach of estimating first-time homebuyers makes it possible to track the mortgage product choices of first-time homebuyers. The common features of these mortgage products provide insights into the economic problems facing potential first-time homebuyers. One feature that is common among popular first-time homebuyer products is a low down payment.

The housing finance system has evolved to make low down payment mortgages a widely available option for first-time homebuyers. In the mortgage finance industry, low down payment mortgages typically refer to loans with an initial LTV ratio of above 80 percent. In practice, however, the average LTV ratios are typically in the mid-to-high 90 percent range, meaning that a majority of borrowers pay five percent or less of the sales price in down payment. Low down payment mortgages have been instrumental in overcoming the down payment affordability challenge for first-time homebuyers. This challenge arises because first-time homebuyers have limited assets. With limited participation in the labor force to earn income and to accumulate savings, most potential first-time homebuyers are not able to afford a 20 percent down payment, even for a single-family home priced at $200,000, which is 14 percent below the median home price in 2016, according to NAR.

Low down payment mortgages have long been a popular choice for first-time homebuyers with the creation of FHA and VA loans in the 1930s and 1940s, and the rise of the private mortgage insurance industry in the 1960s. Between 1994 and 2016, 73 percent of first-time homebuyers chose low down payment mortgages versus 27 percent who made a down payment of at least 20 percent. In terms of the number of home purchases, low down payment mortgages funded an average of 1.3 million first-time homebuyers a year between 1994 and 2016, while mortgages with at least a 20 percent down payment funded the remaining 0.5 million a year. In 2016, close to 1.6 million first-time homebuyers chose low down payment mortgages while just over 0.4 million chose to put down at least 20 percent.

FHA and private mortgage insurance are the two leading low down payment mortgage products for first-time homebuyers and are highly substitutable. Together, they have served close to one million first-time homebuyers a year ($60,000 for FHA and 400,000 for private mortgage insurance) since 1994, accounting for over three quarters of first-time homebuyers served by the low down payment mortgage industry (1.3 million a year). The FHA’s use of a flat pricing structure and loan level pricing adjustments (LLPAs) determined by the Federal Housing Finance Agency (FHFA) and assessed on all GSE loans means that FHA loans tend to have a greater market penetration among borrowers with lower FICO scores, higher debt-to-income ratios, and higher LTV ratios. Together, FHA and private mortgage insurance cover the entire spectrum of first-time homebuyers. VA and USDA loans are loan guaranties backed by the Veterans Affairs and USDA. These two forms of mortgage insurance offer more attractive terms, but they are also subject to more restrictive eligibility criteria such as military service for VA loans and income, home price, and rural property tests for USDA loans that make them unavailable to the wider public. The only other product worth mentioning is the second lien product, which was popular in the

---

8 Genworth Mortgage Insurance Corporation’s predecessor wrote its first mortgage insurance policy in 1961.
The main story over the past two decades is about the changing market share of individual low down payment mortgages rather than changes in the overall reliance on low down payment mortgages as a group.

At the height of the housing boom, both the FHA and private mortgage insurance came under intense competitive pressure from piggyback loans. In 2005 and 2006, these piggyback loans served close to 600,000 first-time homebuyers a year versus 200,000 first-time homebuyers a year earlier in the decade, taking market share from both FHA and the private mortgage insurance industry. In those two years, FHA and private mortgage insurance combined served 650,000 first-time homebuyers a year, which was well below their long-term market share. The reason for the explosion of piggybacks is that first-lien lenders did not take into account the combined LTV of the loan. In the aftermath of the Housing Crisis, the second-lien holders became a significant obstacle to the loan modification effort, making the adjustment process more painful for both lenders and borrowers.

In 2007, credit to first-time homebuyers from private mortgages (part of the other conventional mortgage market in the chart—fig. 10, page 18) and piggyback loans began to contract. Since the private mortgage insurance industry had relatively expansive credit policies at the same time, it insured many unqualified mortgages. Very quickly, mounting losses forced the private mortgage insurance industry to tighten guidelines to conserve capital, which cut loans to first-time homebuyers to just 90,000 a year.

Following the Housing Crisis, low down payment mortgages expanded as part of the government response, with significant growth across all government loan programs. Between 2007 and 2008, government loan programs expanded from 440,000 purchase loans to over 1 million purchase loans, and peaked at 1.3-1.4 million purchase loans in 2009 and 2010. During the 2009-2011 housing trough, government mortgages served close to 930,000 first-time homebuyers a year, accounting for close to 70 percent of the entire first-time homebuyer market. In 2016, government mortgages still funded over one million first-time homebuyers, very close to the 2009 peak, and 41 percent higher than its historical average of 726,000.

The private mortgage insurance industry also made significant recoveries after the Housing Crisis. New entrants into the industry, capital raises, and more disciplined underwriting standards have helped the industry to recover in the following years. Additional pricing and guideline changes have also helped to make private mortgage insurance more competitive. Over the past two years, first-time homebuyers served by the private mortgage insurance industry increased by 160,000, contributing to 32 percent of the total growth.
Over the past two years (2014-2016), FHA and private mortgage insurance have accounted for over 80 percent of the growth in the first-time homebuyer market. In 2016, the FHA served around 730,000 first-time homebuyers while the private mortgage insurance industry served around 510,000 first-time homebuyers.

While repeat homebuyers are not the focus of this report, they serve as a contrast to first-time homebuyers. And the separation of first-time homebuyers also offers the opportunity to look at the trend for repeat homebuyers. The key difference between first-time and repeat homebuyers is that repeat homebuyers typically have home equity as a source of down payment. Both home price appreciation and principal repayment contribute to the build-up of home equity. As a result, lack of down-payment cash is less a concern for repeat homebuyers, and they are far less likely to use low down payment mortgages compared to first-time homebuyers. Between 1994 and 2016, 40 percent of repeat homebuyers used low down payment mortgages compared to 73 percent for first-time homebuyers. This difference supports our view that down payment affordability is a bigger problem for first-time homebuyers. However, while the reliance among first-time homebuyers for low down payment mortgages has increased, we have seen a bigger increase among repeat homebuyers. Since 2007, around 50 percent of repeat homebuyers have relied on low down payment mortgages. That is a 20-point increase in the use of low down payment mortgages compared to the pre-2003 period. The increased popularity of low down payment mortgages has been a significant behavioral change among repeat homebuyers. Even after the Housing Crisis, low down payment mortgages have remained more popular than during the 1990s.

Two factors may have contributed to the greater popularity of low down payment mortgages among repeat homebuyers. During the housing boom, repeat homebuyers wanted to buy bigger homes and to cash out some of their home equity. That drove the increasing use of low down payment mortgages among repeat homebuyers between 2000 and 2007. After 2007, expanded government loan programs made low down payment mortgages more accessible to repeat homebuyers, while repeat homebuyers may also have less home equity than earlier times due to the overall decline in home prices.
Fig. 9  Repeat Homebuyers Mortgage Choice

![Bar chart showing the percentage of repeat homebuyers choosing different mortgage choices over the years from 1994 to 2016. The chart is color-coded to represent different mortgage choices.]

Source: Genworth Mortgage Insurance

Fig. 10  First-Time Homebuyers Mortgage Choice

![Bar chart showing the number of home sales in thousands from 1994 to 2016. The chart is color-coded to represent different mortgage choices.]

Source: Genworth Mortgage Insurance
FIRST-TIME HOMEBUYERS IN THE MORTGAGE MARKET

To better understand the impact of first-time homebuyers on the mortgage market, we reviewed the first-time homebuyer mix of individual mortgage products. As stated earlier, first-time homebuyers account for a higher percentage of the mortgage market than they do for the single-family housing market because of the presence of cash buyers, who are overwhelmingly repeat buyers. Since 1994, an average of 4.2 million loans a year have been made to homebuyers. The first-time homebuyer market has accounted for an average of 45 percent of the entire market. The mix averaged 42 percent between 1994 and 2000, but declined in the early 2000s. Between 2003 and 2005, the first-time homebuyer mix in the mortgage market averaged just 33 percent, mirroring its decline in the single-family housing market. The surge in second-lien mortgages near the peak of the housing boom helped to buoy the first-time homebuyer mix in 2006 and 2007. And government efforts to support the housing market in 2008 and 2009 through tax credits and expanded lending programs helped to push the first-time homebuyer mix in the mortgage market to 60 percent, albeit in a much smaller market. Since 2008, 55 percent of the purchase mortgages originated have been directed to first-time homebuyers—higher than the mix in the previous cycle.

The FHA loan guaranty program has a high mix of first-time homebuyers and is also the largest lending program to first-time homebuyers. An FHA loan requires a down payment as low as 3.5 percent, and its pricing and underwriting guidelines make it attractive to borrowers representing greater risk attributes. FHA’s first-time homebuyer mix has averaged 80 percent between 1994 and 2016. At its lowest level in 2011 (after the expiration of the first-time homebuyer tax credit), FHA’s first-time homebuyer mix was 76 percent. Between 2014 and 2016, it has averaged 82 percent.

The USDA loan guaranty program also has a very high mix of first-time homebuyers as it has no down payment requirements. USDA’s first-time homebuyer mix has averaged 82 percent between 1994 and 2016. Since 2012, USDA’s first-time homebuyer mix has averaged 86 percent.

Like the USDA loan guaranty program, the VA loan guaranty program also has no down payment requirements. Between 1994 and 2016, the VA loan guaranty program has reported a first-time homebuyer mix of 50 percent. Its first-time homebuyer mix decreased to an average of 42 percent from 2011-2014, but rebounded sharply to 52 percent in 2016.

Among the different mortgage products, the private mortgage insurance industry has seen the most movement in first-time homebuyer mix, moving from 60-70 percent in the mid-90s to 30-40 percent in the 2000s. Between 1994 and 2016, the first-time homebuyer mix for the private mortgage insurance industry has averaged 47 percent. The lowest point was 31 percent in 2004, when it faced strong competition from piggyback loans. Between 2009 and 2016, the first-time homebuyer mix increased significantly from 41 percent to 55 percent. This movement is likely influenced by pricing and guideline changes—both from the industry and from competing products.

For the second-lien mortgage market, which competes against the rest of the mortgage insurance market, there is no data on its first-time homebuyer concentration. We assume
that it is similar to the rest of the low down payment mortgage market combined. It is marketed as a substitute for mortgage insurance, and therefore its first-time homebuyer mix is likely to be similar to that in the overall low down payment mortgage market. This is also supported by the fact that other low down payment mortgage products all experienced reduced origination volume during the most active period for the second-lien mortgage market.

Up to this point, we have only looked at mortgage products with LTVs above 80 percent, which dominate the first-time homebuyer market. It is very instructive to look at mortgage products with LTVs below 80 percent, which tend to have a lower mix of first-time homebuyers and a higher mix of repeat homebuyers. Using GSE loans with LTVs below 80 percent as a proxy, we find that the first-time homebuyer mix for below-80 percent LTV mortgages averaged 27 percent between 1994 and 2016. This is evidence that the first-time homebuyer mix moves inversely with the down payment requirement for a mortgage.

The first-time homebuyer mix on the below-80 percent LTV mortgage products is higher in the current cycle than historically. Between 2009 and 2016, the first-time homebuyer mix has averaged 36 percent, compared to the 23 percent average for pre-2009. This suggests less awareness amongst, or willingness on the part of, first-time homebuyers to choose low down payment options, with more opting instead to pursue high down payment mortgages. But the mix since 2010 has seen a gradual decline, so now more first-time homebuyers are migrating to low down payment mortgages.

Fig. 11 First-Time Homebuyers Mix by Mortgage Product

Source: Genworth Mortgage Insurance
2016 SINGLE-FAMILY HOUSING MARKET AND FIRST-TIME HOMEBUYERS

One of the lessons from the Housing Crisis is that housing finance, as a key input, is critically important to the housing market. The approach we have adopted to estimate the first-time homebuyer market helps us build a bridge between the housing market and the mortgage market. The chart below (fig.12) shows the composition of the single-family housing market from a financing and homebuyer status perspective, illustrating the relationship between the housing and mortgage markets.

The single-family housing market reported home sales of 5.4 million units in 2016. Based on our estimate, 4.1 million units were purchased with mortgage financing, which implies 1.3 million units were purchased with cash or bought by international homebuyers. Among the 4.1 million units, 3.6 million units were purchased by homebuyers who intend to use the property as primary residence while 0.4 million units were purchased by potential landlords. Among the 3.6 million homebuyers, 2 million were first-time homebuyers and 1.6 million were repeat homebuyers. The 3.6 million combined homebuyer market can also be divided into different mortgage products: private mortgage insurance (0.9 million), FHA loans (0.9 million), below-80 percent LTV GSE loans (0.8 million), other conventional markets (0.5 million), VA loans (0.4 million), and USDA loans (0.1 million).
CONCLUSION

Our belief in the importance of the first-time homebuyer market and the lack of data for this important market segment motivated this study and we will update this series on a quarterly basis. We hope that the release of this study will lead to more research and data on the first-time homebuyer market. This study provides an estimate of the first-time homebuyer market (1.8 million a year historically), confirming its importance to the overall housing market (35 percent of single-family homes sold) and mortgage market (45 percent of purchase mortgages). By looking over the last two housing cycles, it is very clear that first-time homebuyers and repeat homebuyers have shown very different trends. Repeat homebuyers drove the housing boom of the 1990s and early 2000s, suffered a bigger setback during the Housing Crisis, and have experienced very slow recovery. In contrast, first-time homebuyers were relatively stagnant during the last housing boom. It also confirms what we have seen in the mortgage insurance industry: that the first-time homebuyer market has been growing rapidly since 2014 (85 percent of the growth in home sales), and that it still has more potential to grow (three million first-time homebuyers missing in the last 10 years). We believe that two key attributes of the current housing market—low inventory and rapid home price appreciation—are the direct results of the rapid growth in the first-time homebuyer market. Our study also sheds light on the down payment affordability challenge facing first-time homebuyers and how the mortgage market has addressed that problem through the development of low down payment mortgage products. These products have served the needs of first-time homebuyers (73 percent of first-time homebuyers choose low down payment mortgages; first-time homebuyer mix moves inversely with down payment size). The lesson learned from the Housing Crisis is that we need to ensure that low down payment mortgages are sustainable over the long run.

ABOUT TIAN LIU

Tian Liu has served as Chief Economist for Genworth Mortgage Insurance Corporation since 2014. He is responsible for tracking and analysis of U.S. and regional economic conditions. He authors the company’s Weekly Economic Report and provides regular updates on housing and mortgage markets. Mr. Liu began covering the U.S. housing market in 2007. His commentary on the housing market has appeared in the Wall Street Journal, New York Times, CNBC, Washington Post, and other notable publications.

Mr. Liu has a Masters in Economics from the University of Chicago and an undergraduate degree in Economics from the Australian National University. He resides in Raleigh, North Carolina, with his wife and two children.
APPENDIX

In this section, we discuss the data and assumptions used to estimate the number of purchase borrowers and first-time homebuyers at the mortgage product level.

FHA LOANS

Among all the mortgage products today, the FHA has the most comprehensive report on first-time homebuyers. It releases aggregated first-time homebuyer data on a monthly basis, and has been doing so since at least 1997. We used the FHA’s reported first-time homebuyer data contained in its monthly production reports, as well as quarterly and annual reports to Congress. As far as we know, there is no publicly available data on the FHA’s first-time homebuyer market pre-1997. For the pre-1997 period, we used the FHA’s reported monthly purchase loan count (available between 1994 and 1997), and assume that the FHA had attracted a similar mix of first-time homebuyers (80 percent of purchase loans) among its purchase borrowers. Beginning in 2013, Ginnie Mae’s securitization data contain FHA borrowers’ first-time homebuyer status. But as noted by the Urban Institute (2015), Ginnie Mae data significantly under-reports first-time homebuyer mix compared to the FHA reports covering the same period. For this reason, we will use the FHA’s reported first-time homebuyer data in future updates.

PRIVATE MORTGAGE INSURANCE

Between 1980 and 2013, the private mortgage insurance industry’s representative body, Mortgage Insurance Companies of America (MICA), operated an industrywide data collection program that reported the total number of new insurance policies (called certificates) monthly and reported purchase and refinance mix quarterly. Data collection worsened during the Financial Crisis as two major mortgage insurance companies stopped reporting. Even after the expiration of MICA’s data collection program in 2013, individual MI companies continued to report total origination volume and origination volume for home purchases in their quarterly earnings releases, making it possible to calculate industry-level origination volume both in aggregate and by loan purpose. The purchase loan count estimated from the private mortgage insurance industry is an important input in estimating first-time homebuyers whose mortgages had mortgage insurance coverage.

A different way of capturing the purchase market in the private mortgage insurance industry is by looking at the high-LTV segment of the GSE loan dataset. Beginning in 2013, the GSEs started to report loan-level acquisition data that went as far back as 1999, including loan purpose, first-time homebuyer status, and LTV ratio. Beginning in 2012, eMBS also started to report GSE acquisition at the loan level and in real-time. These fields have made it possible to calculate for the high-LTV segment of the GSE market: loan count, origination volume, average loan size, LTV, and homebuyer type.

---

9 However, this program did not collect first-time homebuyer mix data. In addition, between 2011 and 2013, two mortgage insurance companies stopped participating in the data collection program.
10 One of the mortgage insurers, United Guaranty Corporation, which is owned by American International Group (AIG), reported only total origination volumes during this period.
While the GSE loan level dataset provides the most reliable view on the private mortgage insurance market in the GSE loan space, it does not capture the entire private mortgage insurance market prior to the Housing Crisis. A comparison of the GSE high-LTV purchase market against that of the private mortgage insurance industry shows that the GSEs represented less than 50 percent of the private mortgage insurance market pre-Crisis. The gap was at its widest during 2007 and early 2008. But by late 2008, the mortgage insurance industry had begun to tighten guidelines and pricing, and by early 2009, the mortgage insurance industry’s market outside the GSE credit box had largely disappeared, leading to a convergence in the two series. After the Housing Crisis, GSE loans have represented the vast majority of the mortgage insurance industry’s business. To capture the mortgage insurance market in its entirety, we used the quarterly new insurance written (NIW) on purchase loans (dollar volume) reported by mortgage insurers, and the average balance on such loans (based on Genworth data) to calculate the total number of home purchases beginning in 2011. Between 1994 and 2010, we used MICA purchase loan data (which is quarterly) adjusted for Genworth monthly weights.

The “MICA/GNW” series uses the total certificate count from MICA and quarterly purchase mixes from MICA and monthly purchase mix from Genworth to construct a monthly series of purchase loan count through the end of 2010. The “GNW” series uses MI company-reported industry purchase NIW, and average purchase loan balance from Genworth to construct a monthly series of purchase loan count post-2008. These two series both represent MI industry level purchase loan count, with overlap between 2008 and 2010. During that period, they are consistent with each other even though they are constructed using different methodologies. This consistency gives us confidence that Genworth purchase borrower profile matches that for the private mortgage insurance industry. The “GSE” series is based on the GSE loan level database and represents GSE-backed conventional purchase loans with mortgage insurance coverage. The “eMBS” series also covers the same loans but is for the period after August 2013. These four series show that between 2000 and 2009 (and likely for pre-2000), private mortgage insurance coverage extended beyond GSE loans. Post-Financial Crisis, private mortgage insurance coverage is more closely confined to GSE loans, although one can still see private mortgage insurance beyond GSE loans, but on a smaller scale compared to the pre-Crisis period.

Fig. 13

Source: Genworth Mortgage Insurance, MICA, GSE, eMBS
FIRST-TIME HOMEBUYER MIX

MICA did not collect data on the first-time homebuyer market segment for the mortgage insurance industry. Therefore, to estimate the size of the first-time homebuyer market, we used first-time homebuyer mix from Genworth Mortgage Insurance between 1994 and 2010, from the GSE loan-level dataset between 2011 and April 2012 (since the eMBS dataset was not available during this period), and from the eMBS's GSE loan-level dataset beginning in May 2012.

We used first-time homebuyer mix from Genworth Mortgage Insurance as a proxy for the mortgage insurance industry, which captures the first-time homebuyer mix going back to 1994. Competition in the mortgage insurance industry as well as insurance regulation ensure that mortgage insurance companies offer pricing, terms, and service levels. This makes it reasonable to assume that the first-time homebuyer mix for Genworth is not significantly different from that of the mortgage insurance industry.

The raw first-time homebuyer mix requires further adjustment since a significant number of borrowers did not report their first-time homebuyer status on mortgage application forms pre-2009. We assign a first-time homebuyer mix to borrowers with unknown status based on their average loan balance relative to those with known status. This is because first-time homebuyers have a lower average loan balance than repeat homebuyers. Therefore, we assume that borrowers with unknown first-time homebuyer status contain a higher percentage of first-time homebuyers if their average loan balance is lower, or closer to the average balance of known first-time homebuyers. The gap between raw and adjusted first-time homebuyer mix was at its widest in the late 1990s and early 2000s, and smaller in other periods. We used the adjusted first-time homebuyer mix for up to 2010. After 2011, response rates increased significantly on borrower status because of better underwriting quality and greater awareness of borrowers’ first-time homebuyer status due to the tax credit. The GSE dataset and the eMBS dataset had well-populated first-time homebuyer mixes, making adjustments unnecessary.

OTHER CONVENTIONAL MORTGAGES

When it comes to the conventional market, GSEs are not the only players. The other significant players in the conventional market include loans held by lenders as an investment (portfolio loans) which are mostly jumbo loans, subprime loans, and Alt-A loans (before the Financial Crisis). So it is important to account for the non-GSE conventional mortgage market. HMDA data groups GSE and non-GSE loans as conventional. The non-GSE conventional market is simply the residual of the conventional market after eliminating private mortgage insurance loans and the low-LTV GSE mortgages. We believe that the first-time homebuyer mix for the rest of the conventional mortgage market is similar to what is observed on the low-LTV GSE segment.
VA LOANS

HUD has published a monthly loan count for the VA loan guaranty program since January 1994. In the same publication, HUD reports the annual (calendar year) loan count for the VA loan program going back to 1968. Since 1995, the Veterans Benefits Administration has reported on a fiscal year basis VA loan guaranty program’s first-time homebuyer mix and purchase loan count. Combining these two data sources, we estimated the number of purchase loans and number of loans to first-time homebuyers under the VA loan guaranty program.

More recently, the Federal Reserve Board has published a monthly version of HMDA data giving us a monthly loan count and loan volume for purchase loans covering 2004 to 2015. Combining the monthly HMDA data and VA’s first-time homebuyer mix gives another measure of the first-time homebuyer count through the VA loan guaranty program. Comparing these two series shows that they yield similar results in both the number of purchase loans and the number of first-time homebuyers when there is data overlap. For updates after 2015, we obtained monthly loan count and loan volume by geography and by loan purpose from the VA loan guaranty program, which gives a direct report on the number of purchase loan borrowers. We then calculate the first-time homebuyer count using the purchase loan count and the first-time homebuyer’s mix calculated from securitized VA loans.

The charts below (fig. 14, fig. 15 & fig. 16) compare these three data sources by total loan count, by purchase loan count, and by first-time homebuyer count.
USDA’S RURAL HOUSING SERVICE

The USDA’s Rural Housing Service is a small loan guaranty program in terms of its overall loan volume. However, a low average loan balance and a higher mix of purchase loans and first-time homebuyers make this small program worth tracking. The program also expanded significantly during the Housing Crisis.

Like the FHA, the USDA publishes a monthly report on loan count and loan volume. More recent reports have included buyer type (first-time homebuyer vs. other borrowers) by month. These reports show that first-time homebuyers represent a high percentage of the USDA’s purchase loan borrowers (80 – 90 percent). Beginning in 2004, USDA data is complemented by HMDA data, which reports the number and volume of purchase and refinance loans. HMDA data tells us that USDA loans have been dominated by purchase loans (high-90 percent).

SECOND-LIEN MORTGAGES

Second-lien mortgages allow homebuyers to take out a second loan. When combined with another mortgage with at least 20 percent down payment, the borrower could achieve net down payment less than 20 percent of the property value without having to take out mortgage insurance on the first mortgage. The avoidance of mortgage insurance premiums allows second-lien mortgages to compete against other low down payment, high-LTV loans. In their peak years between 2005 and 2006, second-lien mortgages topped 1.2 million purchase loans each year, taking significant market share from the traditional low down payment mortgage market. HMDA reports second-lien purchase mortgages. Because it is a substitute for insured mortgage products, we assume that second-lien mortgages have a similar mix of first-time homebuyers as the overall low down payment mortgage market.
Genworth Mortgage Insurance, an operating segment of Genworth Financial, Inc. (NYSE: GNW), is headquartered in Raleigh, North Carolina, and operates in all 50 states and the District of Columbia. Genworth Mortgage Insurance works with lenders and other partners to help people responsibly achieve and maintain the dream of homeownership by ensuring the broad availability of affordable low down payment mortgage loans. Genworth has been providing mortgage insurance products and services in the U.S. since 1981.

Let’s help someone buy a house today.

mi.genworth.com
miblog.genworth.com