



Office of the Chief Economist

Insight & Outlook

November 23, 2015

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Insight: Mass Production and Mortgages

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Outlook: The 55+ Age Group

Demographics drive the housing market. For instance, the press overflows with questions about Millennials – when will they form households and buy homes? The housing choices of the Millennials matter greatly, but just as impactful are the choices that will be made by the older generation, those who are 55 and older. (p.5)

In Closing: The cost of delaying the unavoidable

The Great Recession spawned significant changes in the laws and regulations governing financial services – especially housing finance – with the goal of preventing a repeat of this type of crisis. However, as bad as it was, the impact of the recession varied across states. (p.14)

Forecast Summary	2015	2016
Real GDP Growth (%)	2.2	2.5
30-Year Fixed Mtg. Rate (%)	3.9	4.3
FMHPI House Price Appreciation (%)	5.4	4.3
1-4 Family Mortgage Originations (\$ Billions)	1,750	1,580

Insight: Mass Production and Mortgages

Henry Ford is justly-celebrated for his application of mass production techniques to automobiles. Breaking the complex process of automobile assembly into a rigid sequence of standardized tasks increased productivity, reduced costs, improved quality and made possible the growth of the automotive industry.

Something similar characterizes the mortgage industry. The small-town vision of mortgage lending depicted in films like "It's A Wonderful Life" – where the owner of the local savings & loan knows each borrower and their families personally – is far removed from the way mortgages are mass produced in the United States. The many different steps in the mortgage lending process – origination, underwriting, funding, servicing, etc. – are broken into standardized pieces and handled by specialists, often in separate firms.

Mortgage servicing may be the area of mortgage finance to embrace the automated and standardized production techniques of the automotive industry most thoroughly. Many servicing functions resemble the assembly line processes used in auto manufacturing. Collecting and disbursing payments, verifying paperwork, adhering to rigidly-defined processes – all lend themselves to the factory-floor model. And the economies of scale in servicing provide competitive pressure to operate at high volumes. As a result, by 2009 a multi-decade trend of consolidation in servicing produced a market share of 59 percent for the top five servicers.

The housing crisis challenged the traditional business model of mortgage servicing. The foreclosure tsunami overwhelmed an industry designed around routine processes and limited contact with borrowers. Servicers struggled to adapt to new loan modification programs and foreclosure guidelines. In



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these circumstances, servicers' performance often fell short of industry standards and legal requirements. And in February 2012, the Department of Justice and 49 state attorneys general reached a \$25 billion settlement with the five largest mortgage servicers to remediate past shortcomings and to improve performance in the future.

Today's mortgage servicing industry looks very different from the pre-crisis industry. The market share of the large banks has dropped, and smaller servicers and nonbank servicers play a greater role. The costs of servicing have increased sharply, especially for nonperforming loans. Specialty servicers – focusing on the high-touch servicing required for nonperforming loans – now are an essential component of the servicing business.

These changes in mortgage servicing reflect responses to the experience of the housing crisis, the increase in financial services regulation, and concomitant changes in the rest of housing finance. And, just as in housing finance generally, more change is likely to come as the industry continues to adapt.

In this month's Insight, we review these changes in mortgage servicing and discuss some of the factors that produced them.

The drivers of change in mortgage servicing

Several factors account for the changes playing out in the mortgage servicing industry:

- Regulatory and counterparty oversight of servicing has increased;
- Post-crisis changes in servicing practices have significantly increased the cost to service, particularly for nonperforming loans;
- The cost of holding mortgage servicing rights (MSR) as an asset has increased in the wake of new capital rules and increased regulatory scrutiny.

Let's take each of these factors in turn.

Increase in regulatory and counterparty oversight

Mortgage servicing always has been subject to regulation by multiple entities. National and state bank regulators, state consumer protection agencies, the GSEs, FHA, and investors in mortgage securities all have exercised oversight.

The servicing problems that surfaced during the housing crisis spawned new laws, regulations, and a new regulatory body to govern servicing. In early 2011, HUD, FHFA, and the U.S. Department of Treasury formed an interagency working group on mortgage servicing. The Dodd-Frank Act, among many other things, created the Consumer Financial Protection Bureau (CFPB) with direct supervisory authority over all banks with more than \$10 billion in assets and all nonbanks engaged in residential mortgage markets. The CFPB joined the interagency working group in July 2011. The CFPB consolidated some responsibilities that previously had been housed in other regulatory agencies. The CFPB was also given wide-ranging authority to prohibit "unfair, deceptive or abusive acts or practices" (UDAAP) in connection with consumer financial products and services including mortgage servicing.

In April 2012, CFPB released a regulatory road map for mortgage servicing, and heightened servicing standards became effective in January 2014. These standards increase the "high-touch" aspects of servicing and impose explicit timelines on servicers' responses to consumers in a number of areas. Among the new standards is a requirement of "continuity of contact" when dealing with delinquent borrowers requesting a loan modification. This addresses a key frustration that surfaced during the crisis, as many distressed borrowers were passed from representative to representative when working with a servicer.

FHA and the GSEs also have strengthened their oversight of servicers. There always have been servicer scorecards to gauge performance, but those scorecards were refined over the last few years in light of the experiences during

the housing crisis. Contractual performance standards and timelines were enhanced, and compensatory fees are levied for failure to meet those contractual standards.

Increases in servicing costs

Mortgage services incur the ordinary costs of any financial services back office business – these are the direct costs to service. Servicers incur additional costs when borrowers fail to make their payments: the interest expense for servicing advances to investors, collection costs, unreimbursed foreclosure and property expenses, and the compensatory fees mentioned in the previous section. Servicers also are exposed to representation and warranty claims.

The cost to service a nonperforming loan exceeds the compensation received by the servicer. Prior to the housing crisis, nonperforming loans represented a small enough share of the servicers' portfolios that the per-loan losses on nonperforming loans didn't threaten the overall profitability of the servicing business. Three things changed that picture. First, the increase in oversight has increased the cost to service all loans. Servicers have had to add resources and capacity to meet the new, higher standards. Second, the increase in cost has been concentrated in the servicing of nonperforming loans. Between 2008 and 2013, the average cost to service a performing loan increased 2.6 times. Over the same period, the cost to service a nonperforming loan increased 4.9 times. Third, the number of nonperforming loans surged during the housing crisis, and nonperforming loans remain a significant share of legacy portfolios.

In addition to the measurable increases in servicing costs, there appears to be an unmeasurable but real concern among servicers about potential liability for mistakes – substantive or technical – that may occur during servicing. In assessing their costs, some servicers seem to be factoring in a mental "reserve" for regulatory uncertainty. This "reserve" may diminish over time as servicers gain more certainty about the future regulatory environment.

Increased cost of holding mortgage servicing rights

Mortgage servicing rights (MSR) refer to the contractual obligation of the mortgage servicer to provide loan servicing functions in exchange for a servicing fee and other compensation. The mortgage servicing asset (MSA) refers to the value of servicing compensation considered as a tradeable asset. (While technically inaccurate, the term "MSR" often is used interchangeably with "MSA".)

Servicers receive three types of compensation:

- A servicing fee calculated as a percentage of the unpaid balance of a loan. For example, the minimum servicing fee for loans sold to Freddie Mac is 25 basis points (0.25 percent).
- Ancillary fees that include late fees, loan modification fees, fees for payoff quotes, etc.
- Float, that is, interest earned on funds held by the servicer in the period between receipt from the borrower and disbursement to claimants.

An MSA is an asset with an uncertain value. Servicing fees cease when the mortgage is paid off or the borrower fails to make payments – two events that can't be predicted with certainty. Similarly, ancillaries and float can be difficult to forecast precisely. Despite these complications, MSAs traditionally have been a significant asset for mortgage originators and servicers.

The capital cost of holding an MSA has increased in recent years. The estimated value of the MSA has counted toward a bank's regulatory capital. However the revised capital rules laid out in Basel III – which began phasing in this year – sharply limit the amount of an MSA that can be counted as capital. In addition, beginning in 2018 the risk weight of the MSA included in capital will increase 2.5 times.



These two changes – limiting an MSA's use as regulatory capital and increasing the asset's risk weight – make it more challenging for banks to achieve target capital ratios, especially in the required CCAR and DFAST stress tests. At present, these changes don't appear to place the largest banks at risk of falling below their target capital levels. However, some mid-sized banks with large mortgage operations may have to reduce their holding of MSAs, increase their holdings of other types of capital, or reduce their assets to maintain their desired capital ratios.

Another factor that increases the cost of MSAs is difficult to quantify but is a real consideration for mortgage servicers. As noted above, MSAs are difficult to value. Moreover their value is very sensitive to changes in market interest rates. As a result, regulators historically have expressed concerns about the robustness both of banks' valuation models and of their processes for hedging the value of the MSAs. For risk management purposes, regulators appear to be encouraging some banks to limit or reduce the share of MSAs on their balance sheet.

The current (and future) shape of mortgage servicing

The factors described above have spawned changes in the structure of the industry:

- The decades-long, pre-crisis trend of consolidation has been reversed, and smaller servicers now manage the majority of all mortgage servicing;
- Nonbanks account for a larger share of servicing than in the past.
- Subservicing appears to be growing generally, and specialty servicing has become a significant sector in the servicing industry.

Prior to the housing crisis and Great Recession, mortgage servicing had followed a decades-long trend of consolidation (Exhibit 1). In 2001, the top five servicers handled 37 percent of all servicing. By 2009, the market share of the top five had grown to 59 percent. But during the recession, this trend reversed, and by the second quarter of 2015 the share of the top five servicers shrank to 40 percent.



Exhibit 1: Market Share of Single-Family Servicing (%)

Source: Inside Mortgage Finance

In the past, most servicers were banks. Among the top twenty servicers in 2009, nonbanks accounted for 9 percent of the servicing. By 2014, that share had increased 2.1 times to 19 percent.

The currently-high share of smaller servicers and nonbank servicers is not unprecedented. It was in the 1980s when the growth of the securitized mortgage market rewarded economies of scale in servicing and started the trend toward consolidation.

Subservicers have become an increasingly important part of the mortgage servicing industry. The skyrocketing cost of high-touch servicing has convinced some servicers to outsource these activities to specialist firms. This trend is most advanced in the servicing of nonperforming loans, the area where costs have increased the most and regulatory requirements are the highest. In fact, anecdotal evidence suggests that subservicers are specializing further, emphasizing particular subareas in servicing nonperforming loans. Some subservicers appear to have greater expertise in servicing loans that are likely to be modified, while other subservicers appear to focus more on loans that are likely to end in foreclosure.

Another factor contributing to the growth of subservicing is the decreased attractiveness to banks of large MSA portfolios. In response, some nonbank investors have focused on MSAs as an attractive financial asset. Many of these investors have no interest in carrying out loan servicing functions, so they hire subservicers to shoulder those responsibilities.

Housing finance is still evolving, and mortgage servicing is likely to continue to change along with it. It's too soon to say if recent trends will persist or be reversed. We can, however, point to some of the factors that are likely to be important in determining the outcomes.

- The increased regulation and higher costs spawned by the housing crisis appear to be here to stay. For now, those factors have reversed the decades-long trend toward consolidation in the mortgage servicing industry.
 - This reversal may be temporary though. To the extent that higher costs are fixed costs for example, the costs of strengthened compliance functions the pressure to capture economies of scale may begin to reassert itself.
 - To the extent that higher costs are marginal costs, rather than fixed costs, some re-consolidation may occur as new types of specialty firms emerge to find ways to take costs out of the required servicing processes.
- Subservicing is likely to persist and perhaps grow. The volume of specialty servicing may shrink as the number of legacy loans dwindles, but specialty servicing is likely to remain an active part of the mortgage servicing industry.
- The current method of compensating servicers where a large share of the compensation comes from a servicing fee paid as a percentage of the unpaid balance of the loan was designed originally to align the incentives of servicers and investors. The increasing capital costs and regulatory scrutiny of MSAs have raised questions about the best structure for servicer compensation in these new circumstances. Any changes in the compensation structure will change servicer incentives and profitability, and are likely to have a significant impact on the nature of the servicing industry.

Outlook: The 55+ Age Group

After the unexpectedly weak employment report in September dashed market expectations of a Fed tightening in December, we commented that strong employment reports in both October and November might still tip the balance toward tightening. October did its part – the October employment report was as strong as the September report was weak. Financial markets appear to be convinced already; in the wake of the October report, some measures of market sentiment suggested a close-to-70 percent probability of a Fed move in December.



We're reserving judgment until the November employment report. Averaging September and October, nonfarm payroll employment grew by 204,000 jobs per month – healthy but not stellar growth. Inflation – the Fed's other guidepost – remains subdued. Headline CPI is expected to bounce higher in early 2016 as the impact of reduced oil prices wears off, but core inflation will remain subdued. Until we see the November employment report, we're maintaining our view that the first Fed tightening move will come in March 2016 – although we admit that, as of today, the odds are roughly a coin flip.

The Economy

The U.S. economy remains the "little engine that could". Growth is slow, but there *is* growth rather than recession. Inflation is moribund. Unemployment has decreased, but so has the labor force participation rate. The Federal Reserve is in a tough spot. The Fed understandably is anxious to drain liquidity from the economy to prevent a future asset bubble, but it runs the risk of tipping a fundamentally weak economy into a (probably mild) recession.

- Real growth slowed to 1.5 percent in the third quarter according to preliminary estimates from the Bureau of Economic Analysis. A wide variety of other economic releases also indicated weakness in the overall economy. In October, the International Monetary Fund lowered their estimate of 2015 global growth 0.2 percent, to 3.1 percent. If this forecast holds, 2015 will record the slowest rate of global growth since 2009.
- The unemployment rate ticked down a tenth to 5.0 percent in October, but the labor force participation rate remains below 63 percent. Wage growth in October came in at the high end of market expectations.
- Inflation remains subdued. Growth in the GDP deflator dropped from 2.1 percent in the second quarter to 1.2 percent in the third quarter. Other broad-based measures of inflation and inflation expectations remain weak.

We continue to expect 2.5 percent real growth in 2016 and an unemployment rate just under five percent by the second quarter. Headline CPI inflation will rebound as the depressing influence of lower oil prices wears off, but core inflation will remain subdued. As the Fed begins increasing rates – we think in March, although it may come as early as December – the 30-year mortgage rate will increase to 4.6 percent by the fourth quarter of 2016.

Housing

U.S. housing markets continue their long recovery from the Great Recession. Home sales and house prices represent the bright spots. While housing starts are increasing, they are expected to stay shy of their long-run average.

Home sales in 2015 remain on pace for their best year since 2007, and we expect an additional modest increase in 2016. Distressed sales – foreclosures and short sales – continue to decline which tends to reduce the share of cash sales. The combination of higher home sales and a lower share of cash sales convinced us to increase our estimates of mortgage originations in both 2015 and 2016 by 13 to 14 percent.

Inventories of homes available for sale remain lean. As noted above, the number of foreclosed and short sale properties has dropped. Baby boomers appear to be staying in the family home longer than previous generations (see our discussion below of the 55+ age group). The inventory of homes available for sale represents less than six months of sales.

The imbalance between housing demand and supply continues to boost prices. We expect house price appreciation to average 5.4 percent in 2015 and to moderate a bit to 4.3 percent in 2016, still well above long-run house price growth. The 2016 moderation in house price inflation reflects, in part, the reduction in affordability and associated reduction in demand that will follow on the Fed's monetary tightening, whenever it occurs. If the Fed acts sooner and increases rates faster than we expect, the rate of house price appreciation could be trimmed further.

The refinance share of mortgage originations will drop in 2016, another victim of the Fed's action to raise interest rates. The reduction in refinances accounts for most of the projected drop in mortgage originations in 2016.

Housing Focus: The 55+ Age Group

Demographics drive the housing market. For instance, the press overflows with questions about Millennials – when will they form households and buy homes? The housing choices of the Millennials matter greatly, but just as impactful are the choices that will be made by the older generation, those who are 55 and older.

Exhibit 1 highlights the economic impact of the 55+ population. The pair of bars on the left compares the raw numbers of people in the less-than-55 and 55+ age groups. Almost three-quarters of the people are under 55. The pair of bars on the right compares the home equity (primary home) owned by each age group. Two-thirds of the housing wealth is owned by the 55+ group.



Exhibit 1: Housing equity is concentrated in the older generation

Source: Census, Author's tabulations of 2013 Survey of Consumer Finances

The housing choices made by the 55+ population, to a large extent, will define the opportunities available to younger people, including Millennials. If the 55+ers decide to age in place, the number of existing homes available to later generations will be limited. Those currently older than 55 are expected to live longer than previous generations, increasing demand for senior-focused housing of all types – senior-friendly apartments, assisted-living units, and traditional single-family homes outfitted for the special needs of seniors. Much of that senior-specific housing has yet to be built. And housing finance will be affected if the 55+ group decides to monetize the equity in their homes.

Understanding this age group better is essential to anticipating the future of housing.

Housing profile of the 55+ group

The 55+ age group currently includes the Greatest Generation (ages 70+, born before 1946) and Baby Boomers (ages 51 to 69, born between 1946 and 1964). Each year over the next fifteen years, a portion of Generation X will join the group and some of the existing 55+ group will pass away.

According to estimates by the Urban Institute, households aged 55+ will account for more than all of the growth in households over the decade spanning 2010 to 2020 (Exhibit 2). While householders aged 55+ will grow by between 12.4 and 12.9 million over this period, households headed by those aged 54 and younger will shrink in number by between 0.4 and 1.7 million over the same period.





This age group holds the keys to an outsized share of the nation's housing stock and housing wealth. According to the 2013 Survey of Consumer Finances, households aged 55+ accounted for 42 percent of all households, but held two-thirds of all home equity.

One reason for the high share of equity is the large number of 55+ households with no mortgage debt on their primary residence. While only about 19 percent of all homeowners younger than 55 own without mortgage debt, 52 percent of all households aged 55+ own their homes free and clear. As a result, the 55+ group accounts for only one-third of all mortgage debt, including home equity loans, on primary residences. And the incidence of mortgage debt continues to decline with age – only one-fifth of households aged 80+ have a mortgage on their primary residence.

The high wealth of the 55+ age group in aggregate masks the significant disparities in wealth within the group. Housing costs remain challenging for a significant number of those aged 55+. About 30 percent of the 55+ households – 15 million households – pay more than 30 percent of their income for housing (gross rent or housing payments). And half of those 15 million households devote over 50 percent of their income to housing costs. Many in the 55+ group need affordable housing.

Looking ahead

The housing decisions of the 55+ age group will play a significant role in shaping the future housing and mortgage markets. Accordingly, we will devote space in future issues of the Insight & Outlook to critical unanswered questions about this group.

Some of the questions about the 55+ group that we'll address include:

- What are their future housing plans?
 - Compared to previous generations, will more of them choose to age-in-place rather than to downsize?

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- How are expectations of longer lifespans affecting their plans?
- Do they have dependents younger or older longer than they had anticipated?
- How are their plans affected by the prevalence of geographically-dispersed families?
- How much is aging-in-place keeping potential supply off the market and hence boosting prices of existing homes?
- How did the Great Recession impact this group?
 - How many delayed retirement because of recession-related financial setbacks?
 - Do they need to work longer than planned, either because of the recession or the lack of adequate retirement resources?
 - Did the recession have different impacts on the already-retired versus the not-quite-retired?
- Does this generation need better information about their housing alternatives?
 - How well do they understand their financial situation?
 - Is counseling specific to 55+ housing needs readily available?
 - How well are the affordable housing needs of the less-affluent among the 55+ group being addressed?
 - Younger members of the 55+ age group are "technology tweeners" more cyber-savvy than their parents but less than their children. What is the best way to reach this group?
- How will the 55+ group manage their housing wealth?
 - What are attitudes toward reverse mortgages?
- How is the construction industry adapting to the growth in 55+ households?

Good information is already available for some of these questions. For others, our answers will necessarily be more speculative. Look for our analyses in future issues.



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November 2015 Economic and Housing Market Outlook

Macroeconomy										
		201	5			2010	Annua	Annual Totals		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016
Real GDP Growth (%)	0.6	3.9	1.5	2.7	2.5	2.5	2.5	2.5	2.2	2.5
Consumer Prices (%)	-3.1	3.0	1.6	1.3	2.4	2.3	2.1	2.1	0.7	2.2
Unemployment Rate (%)	5.6	5.4	5.2	5.0	5.0	4.9	4.9	4.8	5.3	4.9
30-Year Fixed Mtg. Rate (%)	3.7	3.8	4.0	4.0	4.0	4.2	4.4	4.6	3.9	4.3
5/1 Hybrid Treas. Indexed ARM Rate (%)	2.9	2.9	2.9	2.9	2.9	3.4	3.7	4.0	2.9	3.5
10-Year Const. Mat. Treas. Rate (%)	2.0	2.2	2.2	2.2	2.2	2.4	2.5	2.8	2.2	2.5
1-Year Const. Mat. Treas. Rate (%)	0.2	0.3	0.3	0.3	0.3	0.6	0.9	1.1	0.3	0.7

Housing and Mortgage Markets										
		201	5			201	Annual Totals			
	Q1	Q2	Q3	Q4	Q1	Q2	Q4	2015	2016	
Housing Starts	0.98	1.16	1.16	1.20	1.25	1.30	1.35	1.40	1.13	1.33
Total Home Sales (Incl. Condos)	5.49	5.79	5.98	5.80	5.85	5.95	5.95	6.10	5.77	5.96
FMHPI House Price Appreciation (%)	1.6	1.2	1.4	1.1	1.1	1.1	1.1	0.9	5.4	4.3
S&P/Case-Shiller® Price Index (%)	1.1	0.2	1.0	1.0	1.0	1.0	0.9	0.9	3.3	3.9
1-4 Family Mortgage Originations										
Conventional	320	390	337	320	256	368	336	304	1367	1264
FHA & VA	80	110	113	80	64	92	84	76	383	316
Total	400	500	450	400	320	460	420	380	1750	1580
Refinancing Share - Applications (%)	63	47	50	56	54	40	39	38	53	42
Refinancing Share - Originations (%)	52	45	45	50	50	35	30	28	48	35
Residential Mortgage Debt (%)	-0.3	2.5	2.0	2.5	2.5	3.0	3.0	3.5	1.7	3.0

Note: Quarterly and annual forecasts are shown in shaded areas; totals may not add due to rounding; quarterly data expressed as annual rates.

Annual forecast data are averages of guarterly values; annual historical data are reported as Q4 over Q4.

a. Calculations based on quarterly average of monthly index levels; index levels based on the seasonally-adjusted, all-urban consumer price index.

b. Quarterly average of monthly unemployment rates (seasonally-adjusted); Quarterly average of monthly interest rates (not seasonally-adjusted).

c. Millions of housing units; quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).

d. Millions of housing units; total sales are the sum of new and existing single-family homes; quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).

e. Quarterly growth rate of Freddie Mac's House Price Index; seasonally-adjusted; annual rates for yearly data.

f. National composite index (quarterly growth rate), seasonally-adjusted; annual rates for yearly data.

g. Billions of dollars (not seasonally-adjusted); conventional for 2014 are Freddie Mac estimates.

h. MBA Applications Survey: activity by dollars, total market refi share percent for United States (not seasonally-adjusted).

i. Home Mortgage Disclosure Act for all single-family mortgages (not seasonally-adjusted); annual share is dollar-weighted average of quarterly shares (2014 estimated).

j. Federal Reserve Board; growth rate of residential mortgage debt, the sum of single-family and multifamily mortgages (not seasonally-adjusted, annual rate).

Prepared by Office of the Chief Economist and reflects views as of 11/10/2015 (PTT); Send comments and questions to chief_economist@freddiemac.com.

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Residential Mortgage Debt (%)

Forecast Changes Tracking Table

Macroeconomy										
		201	5			Annual	Totals			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016
Real GDP Growth (%)			0.1						0.0	
Consumer Prices (%)										
Unemployment Rate (%)				-0.1	-0.1	-0.2	-0.1	-0.2	0.0	-0.2
30-Year Fixed Mtg. Rate (%)										
5/1 Hybrid Treas. Indexed ARM Rate (%)										
10-Year Const. Mat. Treas. Rate (%)										
1-Year Const. Mat. Treas. Rate (%)										
Housing and Mortgage Markets										
Housing and Mortgage Markets		201	5			201	6		Annual	Totals
Housing and Mortgage Markets	Q1	201 Q2	5 Q3	Q4	Q1	201 Q2	6 Q3	Q4	Annual 2015	Totals 2016
Housing and Mortgage Markets Housing Starts	Q1	201 Q2	5 Q3 -0.04	Q4 -0.05	Q1 -0.05	201 Q2 -0.05	6 Q3 -0.10	Q4 -0.10	Annual 2015 -0.02	Totals 2016 -0.08
Housing and Mortgage Markets Housing Starts Total Home Sales (Incl. Condos)	Q1	201 Q2 -0.01	5 Q3 -0.04 0.13	Q4 -0.05	Q1 -0.05	201 Q2 -0.05	6 Q3 -0.10	Q4 -0.10	Annual 2015 -0.02 0.03	Totals 2016 -0.08
Housing and Mortgage Markets Housing Starts Total Home Sales (Incl. Condos) FMHPI House Price Appreciation (%)	Q1	201 Q2 -0.01	5 Q3 -0.04 0.13 0.5	Q4 -0.05	Q1 -0.05	201 Q2 -0.05	6 Q3 -0.10	Q4 -0.10	Annual 2015 -0.02 0.03 0.5	Totals 2016 -0.08
Housing and Mortgage Markets Housing Starts Total Home Sales (Incl. Condos) FMHPI House Price Appreciation (%) S&P/Case-Shiller® Price Index (%)	Q1	201 Q2 -0.01	5 -0.04 0.13 0.5	Q4 -0.05	Q1 -0.05	201 Q2 -0.05	6 Q3 -0.10	Q4 -0.10	Annual 2015 -0.02 0.03 0.5	Totals 2016 -0.08
Housing and Mortgage Markets Housing Starts Total Home Sales (Incl. Condos) FMHPI House Price Appreciation (%) S&P/Case-Shiller® Price Index (%) 1-4 Family Mortgage Originations	Q1	201 Q2 -0.01	5 -0.04 0.13 0.5	Q4 -0.05	Q1 -0.05	201 Q2 -0.05	6 Q3 -0.10	Q4 -0.10	Annual 2015 -0.02 0.03 0.5	Totals 2016 -0.08
Housing and Mortgage Markets Housing Starts Total Home Sales (Incl. Condos) FMHPI House Price Appreciation (%) S&P/Case-Shiller® Price Index (%) 1-4 Family Mortgage Originations Conventional	Q1 30	201 Q2 -0.01	5 Q3 -0.04 0.13 0.5 17	Q4 -0.05 80	Q1 -0.05	201 Q2 -0.05	6 Q3 -0.10	Q4 -0.10 84	Annual 2015 -0.02 0.03 0.5	Totals 2016 -0.08
Housing and Mortgage Markets Housing Starts Total Home Sales (Incl. Condos) FMHPI House Price Appreciation (%) S&P/Case-Shiller® Price Index (%) 1-4 Family Mortgage Originations Conventional FHA & VA	Q1 30	201 Q2 -0.01 11 29	5 -0.04 0.13 0.5 17 33	Q4 -0.05 80 20	Q1 -0.05 32 8	201 Q2 -0.05 28 7	6 Q3 -0.10	Q4 -0.10 84 21	Annual 2015 -0.02 0.03 0.5 138 82	Totals 2016 -0.08 144 36
Housing and Mortgage Markets Housing Starts Total Home Sales (Incl. Condos) FMHPI House Price Appreciation (%) S&P/Case-Shiller® Price Index (%) 1-4 Family Mortgage Originations Conventional FHA & VA Total	Q1 30 30	201 Q2 -0.01 11 29 40	5 Q3 -0.04 0.13 0.5 17 33 50	Q4 -0.05 80 20 100	Q1 -0.05 32 8 40	201 Q2 -0.05 28 7 35	6 Q3 -0.10	Q4 -0.10 84 21 105	Annual 2015 -0.02 0.03 0.5 138 82 220	Totals 2016 -0.08 144 36 180
Housing and Mortgage Markets Housing Starts Total Home Sales (Incl. Condos) FMHPI House Price Appreciation (%) S&P/Case-Shiller® Price Index (%) 1-4 Family Mortgage Originations Conventional FHA & VA Total Refinancing Share - Applications (%)	Q1 30 30	201 Q2 -0.01 11 29 40	5 Q3 -0.04 0.13 0.5 17 33 50	Q4 -0.05 80 20 100 11	Q1 -0.05 32 8 40 9	201 Q2 -0.05 28 7 35	6 Q3 -0.10	Q4 -0.10 84 21 105	Annual 2015 -0.02 0.03 0.5 138 82 220 2	Totals 2016 -0.08 144 36 180 2

Note: Nov 2015 forecast less Oct 2015 forecast (red/green indicates a decrease/increase, blank means no change)

Housing Snapshot: A selection of key indicators





2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015



Refinance Share (% of UPB)

Freddie Mac House Price Index



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

SF Mortgage Originations (\$ Bil.)



NAR Affordability Index





2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Housing Starts (Ths., SAAR)



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015





Homes for rent (Ths., NSA)



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Rent of Primary Residence (YoY%)



Negative Equity Share





In Closing: The cost of delaying the unavoidable

The Great Recession spawned significant changes in the laws and regulations governing financial services – especially housing finance – with the goal of preventing a repeat of this type of crisis. However, as bad as it was, the impact of the recession varied across states. Some states suffered disproportionately, while others weathered the recession with relatively minor economic damage. Some of this variation in experience can be traced to the differences in the composition of each state's economy. However, some of the variation appears to be related to differences in state laws. Policy makers have been analyzing these disparate outcomes to see if they can identify the mix of laws that best protects a state against economic stress. Last month's Insight & Outlook examined one candidate – a unique Texas law that limits the amount of equity borrowers can extract in home equity lines and loans and cash-out refinances. Research by the Federal Reserve Bank of Dallas suggests this law may have reduced defaults on subprime loans during the recession.

State laws governing the foreclosure process also appear to play a role in how a state weathers a housing crisis. At the risk of some oversimplification, states can be divided into judicial and non-judicial jurisdictions in their governance of the foreclosure process.

- In non-judicial states, the mortgage contract allows lenders to sell the property if the borrower is delinquent. The lender must send a notice of default to the borrower and file a copy with the county. At this point, if the borrower fails to pay the debt or does not dispute the notice, the lender can proceed to a sale of the property.
- In judicial states, the lender must file a notice with a judge documenting the amount of the debt, the delinquency, and why the delinquency should allow the lender to sell the property. The borrower is notified of the filing and given a chance to respond. If the court finds the claim is accurate, the lender is allowed to sell the property.

Judicial reviews are intended to protect the rights of delinquent borrowers and to prevent mistakes or abusive practices by lenders. While judicial reviews may provide important protections to distressed borrowers, these reviews also have the side effect of delaying resolution. Exhibit 1 displays the average number of days from a borrower default until foreclosure in both judicial and non-judicial states. The time to foreclosure is six months longer on average in judicial states. The longest timeline – 22 months in New Jersey, a judicial state – is twice as long as the shortest timeline – 11 months in Michigan and Missouri, both non-judicial states.

	Judicial	Non-judicial	Difference
Default to foreclosure	570	390	180

Exhibit 1: Average timelines in days, 1998-2012

Source: Cordell et al (2013)

Delay can be useful. It can provide time for borrowers to cure their delinquencies or to negotiate a loan modification. In cases where default is unavoidable, borrowers and lenders may be able to use the time to arrange for a foreclosure alternative such as a short sale or a deed-in-lieu agreement.

Despite these potential benefits, delay can be counterproductive. Distressed borrowers are likely to defer maintenance on the home, increasing losses to lenders and guarantors. Deteriorating houses can reduce the



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salability of other homes in the neighborhood. Abandoned homes also can become magnets for crime. Even if the house is maintained properly, delay by itself increases losses to lenders. The cost to service non-performing loans is 15 times higher than the cost to service performing loans. And, if loans are securitized, servicers typically must advance interest payments to investors and make property tax and insurance payments even though they are not receiving payments from the borrowers.

The time-related costs of foreclosure have increased since the beginning of the housing crisis, and the increase has been greatest in judicial states. Before the Great Recession, time-related costs represented 12 percent of total foreclosure costs on average across the United States. The share was 1.6 times higher in judicial states: 16 percent in judicial states versus 10 percent in non-judicial states. In the wake of the housing crisis, the share of time-related costs has increased 67 percent – to 20 percent of total foreclosure costs – and the percentage increase has been greater in judicial states – a 106 percent increase compared to a 40 percent increase in non-judicial states.

To make matters worse, some research finds that the longer timelines associated with judicial reviews do not, in fact, produce better outcomes for borrowers and may even make late-stage modifications less likely. Other research documents the negative impact on neighborhoods of lengthy delays in liquidation.

The housing crisis revealed weaknesses and deficiencies in the servicing of non-performing loans and in the foreclosure process. Headlines about robo-signing and foreclosures of homes owned by active military personnel stationed overseas outraged the public and led to legal settlements between lenders, servicers, and state attorneys-general. These shortcomings provide a reminder that distressed borrowers are in a vulnerable situation and merit legal protection. However, the lengthy delays that are common in some judicial states may be just as damaging. These delays increase losses to lenders and financing costs to borrowers. Moreover, they tend to drag out the healing process in the wake of the housing crisis. States must be thoughtful in finding ways to balance the need to protect distressed borrowers with the equally compelling need to support a well-functioning housing system.

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November 2015 Economic and Housing Market Outlook

<u>Revised 11/10/2015</u>																		
		2014				2015				2016			Annual Totals					
Indicator	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011	2012	2013	2014	2015	2016
Real GDP (%)	-0.9	4.6	4.3	2.1	0.6	3.9	1.5	2.7	2.5	2.5	2.5	2.5	1.7	1.3	2.5	2.5	2.2	2.5
Consumer Prices (%) a.	2.1	2.4	1.2	-0.9	-3.1	3.0	1.6	1.3	2.4	2.3	2.1	2.1	3.3	1.9	1.2	1.2	0.7	2.2
Unemployment Rate (%) b.	6.6	6.2	6.1	5.7	5.6	5.4	5.2	5.0	5.0	4.9	4.9	4.8	8.9	8.1	7.4	6.2	5.3	4.9
30-Year Fixed Mtg. Rate (%) b.	4.4	4.2	4.1	4.0	3.7	3.8	4.0	4.0	4.0	4.2	4.4	4.6	4.5	3.7	4.0	4.2	3.9	4.3
5/1 Hybrid Treas. Indexed ARM Rate (%) b.	3.1	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	3.4	3.7	4.0	3.3	2.8	2.9	3.0	2.9	3.5
10-Year Const. Mat. Treas. Rate (%) b.	2.8	2.6	2.5	2.3	2.0	2.2	2.2	2.2	2.2	2.4	2.5	2.8	2.8	1.8	2.4	2.6	2.2	2.5
1-Year Const. Mat. Treas. Rate (%) b.	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.6	0.9	1.1	0.2	0.2	0.1	0.1	0.3	0.7

	2014 2015									2016			Annual Totals					
Indicator	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011	2012	2013	2014	2015	2016
Housing Starts c.	0.93	0.98	1.03	1.06	0.98	1.16	1.16	1.20	1.25	1.30	1.35	1.40	0.61	0.78	0.92	1.00	1.13	1.33
Total Home Sales d.	5.10	5.31	5.50	5.53	5.49	5.79	5.98	5.80	5.85	5.95	5.95	6.10	4.57	5.03	5.52	5.38	5.77	5.96
FMHPI House Price Appreciation (%) e.	1.6	0.8	1.1	1.5	1.6	1.2	1.4	1.1	1.1	1.1	1.1	0.9	-3.2	6.2	9.6	5.0	5.4	4.3
S&P/Case-Shiller® Home Price Index (%) f.	1.4	-0.1	1.2	2.0	1.1	0.2	1.0	1.0	1.0	1.0	0.9	0.9	-3.7	6.6	10.8	4.6	3.3	3.9
1-4 Family Mortgage Originations g.																		
Conventional	\$200	\$284	\$306	\$301	\$320	\$390	\$337	\$320	\$256	\$368	\$336	\$304	\$1,206	\$1,750	\$1,570	\$1,091	\$1,367	\$1,264
FHA & VA	\$52	\$63	\$71	\$73	\$80	\$110	\$113	\$80	\$64	\$92	\$84	\$76	\$286	\$372	\$355	\$259	\$383	\$316
Total	\$252	\$347	\$377	\$374	\$400	\$500	\$450	\$400	\$320	\$460	\$420	\$380	\$1,492	\$2,122	\$1,925	\$1,350	\$1,750	\$1,580
Refinancing Share - Applications (%) h.	52	45	50	60	63	47	50	56	54	40	39	38	71	77	63	52	53	42
Refinancing Share - Originations (%) i.	42	33	36	45	52	45	45	50	50	35	30	28	64	70	59	39	48	35
Residential Mortgage Debt (%) j.	-0.7	0.4	1.3	1.7	-0.3	2.5	2.0	2.5	2.5	3.0	3.0	3.5	-2.1	-1.8	-0.5	0.7	1.7	3.0

Note: Quarterly and annual forecasts are shown in shaded areas; totals may not add due to rounding; quarterly data expressed as annual rates.

Annual forecast data are averages of quarterly values; annual historical data are reported as Q4 over Q4.

a. Calculations based on quarterly average of monthly index levels; index levels based on the seasonally-adjusted, all-urban consumer price index.

b. Quarterly average of monthly unemployment rates (seasonally-adjusted); Quarterly average of monthly interest rates (not seasonally-adjusted).

c. Millions of housing units; quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).

d. Millions of housing units; total sales are the sum of new and existing single-family homes; quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).

e. Quarterly growth rate of Freddie Mac's House Price Index; seasonally-adjusted; annual rates for yearly data.

f. National composite index (quarterly growth rate), seasonally-adjusted; annual rates for yearly data.

g. Billions of dollars (not seasonally-adjusted); conventional for 2014 are Freddie Mac estimates.

h. MBA Applications Survey: activity by dollars, total market refi share percent for United States (not seasonally-adjusted).

i. Home Mortgage Disclosure Act for all single-family mortgages (not seasonally-adjusted); annual share is dollar-weighted average of quarterly shares (2014 estimated).

Federal Reserve Board; growth rate of residential mortgage debt, the sum of single-family and multifamily mortgages (not seasonally-adjusted, annual rate).

Prepared by Office of the Chief Economist and reflects views as of 11/10/2015 (PTT); Send comments and questions to chief_economist@freddiemac.com.

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