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High Yield Homebuilder Bonds

Recent Performance and Outlook

March 3, 2019

Introduction and Summary

Homebuilder bonds slightly underperformed the broader high yield universe in 2018 and so far in 2019 as the market has recovered. With yield spreads (vs. U.S. Treasurys) still 110 basis points wider than at the end of 2017 (before the sell-off began), homebuilder bonds have further upside potential, assuming that the housing market recovers in 2019, helped by the recent decline in mortgage rates.

Homebuilder bonds are cheap compared to their credit rating category. On average, according to ICE/BofAML, the sector has an average credit rating of Ba3/BB-, an effective yield of 5.9% and an average spread vs. Treasurys of 329 bp. By comparison, ICE/BofAML's BB US High Yield Index has an average rating of Ba2/BB, an effective yield of 5.0% and an average spread of 233 bp. The gap in spread between homebuilder bonds and BBs has widened from about 12 bp at the end of 2017 to 104 bp currently.

Assuming that spreads on homebuilder bonds can drop from 330 bp currently to 230 bp (which is where they were at the end of 2017), homebuilder bonds can earn total returns of around 9% over the next 12 months. The greatest upside potential is in the bonds with the longest maturities, which fell much more sharply in price in the sell-off and have not bounced back as much in the recovery.

For example, MDC Holdings' 6.0% Senior Notes due Jan. 15, 2043 fell 16% in 2018 (net of interest earned) and have rebounded 10.1% so far in 2019. Yet, they would need to advance 16.7% from here to reduce their spread vs. Treasurys back to the 2017 level of 340 bp. Consequently, these Notes have greater upside potential than other homebuilder bonds, but they also carry greater interest rate risk and cyclical exposure (due to their longer maturity).

Discussion and Analysis

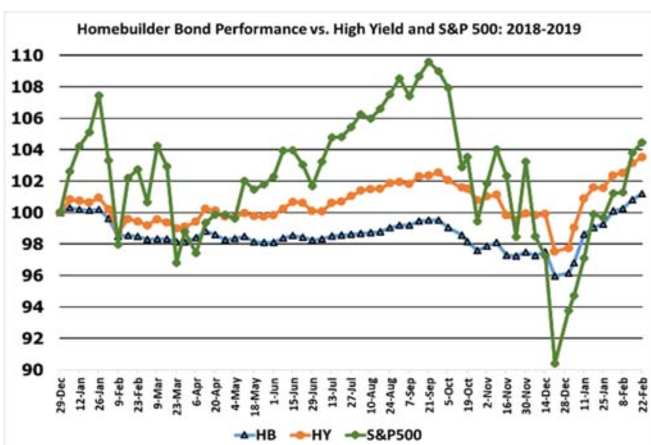
Homebuilder bonds had a negative total return of 3.9% in 2018, according to ICE/BofAML, slightly worse than the broader high yield market's negative total return of 2.3%. So far this year, homebuilder bonds have rebounded sharply, but they have still lagged, delivering a 5.5% total return vs. 6.4% for the high yield market.

Homebuilder Bonds vs. High Yield Universe
Portfolio Composition and Returns

All data as of Mar. 1, 2019	ICE/BofAML U.S. High Yield Master II Index	ICE/BofAML BB U.S. High Yield Index	ICE/BofAML U.S. High Yield Homebuilder and Real Estate Index
Number of Bonds	~1,800	825	96
Current Market Value	$1.2 trillion	$580 billion	$42.0 billion
Effective Yield	6.5%	5.0%	5.9%
Effective Duration	3.8 years	4.1 years	3.9 years
Maturity/Wtd. Average Life	5.8 years	6.2 years	5.4 years
OAS – U.S. Treasurys	386 bp	233 bp	329 bp
Quality	B1	BB2	BB3
Total Return 2018	-2.25%	-2.46%	-3.84%
Total Return YTD 2019	6.40%	6.06%	5.49%

The losses on homebuilder bonds were significantly more muted than in the equity markets. According to my homebuilder stock index, homebuilding stocks plunged 33.5% in 2018, worse than the declines of 6.2% in the S&P 500 and 12.2% in the Russell 2000. So far in 2019 (also through Mar. 1), homebuilding stocks have rebounded 11.7% (after a big sell-off last week), roughly equal to the gain of 11.8% in the S&P 500, but behind the Russell 2000's 17.9% gain.

Despite the lower losses in high yield bonds, the patterns of returns between stocks and high yield bonds have been similar. The peaks and troughs in stocks and high yield bonds were closely aligned in 2018. Both peaked in late September and bottomed in late December.

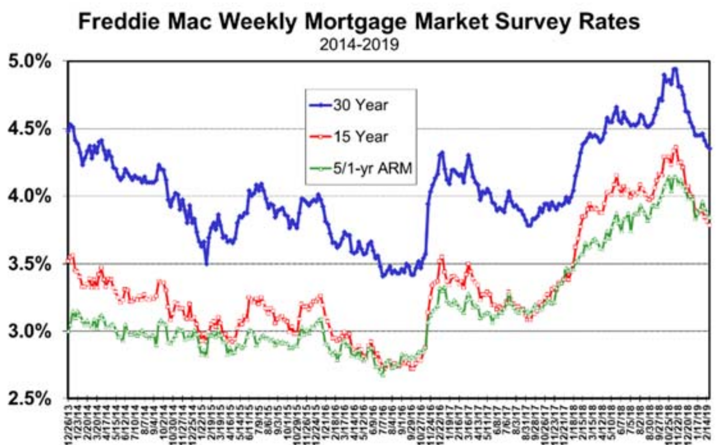


What is noteworthy, however, was the continuing decline in high yield bonds, even as Treasury yields were falling. As a result, the average spread vs. Treasury yields for high yield bonds ballooned from around 350 basis points (bp) for most of 2017 and 2018 to about 535 bp at the end of 2018. Since then, high yield bond spreads have come down to about 400 bp. (Similarly, homebuilder bond spreads jumped from about 275-300 bp to a peak of 460 bp and have since fallen back to 330 bp.) At current spread levels, homebuilder bonds could tighten by as much as 50 bp in the coming months, assuming that Treasury yields remain stable and the factors that led to the 2018 fourth quarter sell-off continue to subside.

Spring Selling Season Looks Promising

The Spring selling season, which is just now underway, looks promising as a result of the 59 bp drop in mortgage rates since early November. According to Freddie Mac, the average rate on 30-year mortgage declined from 4.94% in mid-November to 4.35% in the latest week (ended Mar. 1). At the current level, mortgage rates are below where they were a year ago.

Last week's rise in interest rates bears watching. The 10-year Treasury yield jumped 11 bp to 2.76%. At the long-run average spread of 175 bp, we should expect 30-year mortgage rates to rise to 4.51% next week. That was undoubtedly a catalyst in the average 5.6% decline in homebuilding stocks last week.



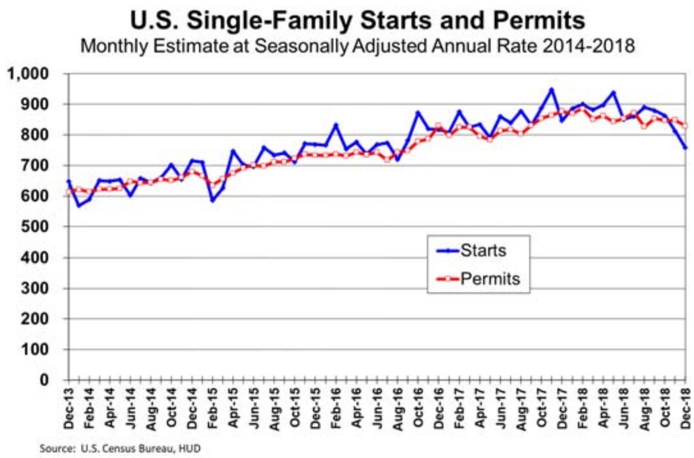
Source: Freddie Mac

Even so, with the drop in mortgage rates since November, some of the pressure on housing affordability has subsided. The 59 bp drop in mortgage rates (to Mar. 1) reduces the income requirement on the purchase of a home by 4.6%, according to my calculations. This was offset mostly by the average 4.7% increase in house prices in 2018, according to Case-Shiller. Assuming no change in mortgage rates, real estate taxes, house insurance and mortgage insurance, the 4.7% house price increase raises the income requirement by about 3.2%; but that is less than the 8.2% increase that would have occurred in the monthly mortgage payment, if mortgage rates had remained at 4.94%.

Thus, it is a pretty good bet that many potential buyers, especially potential entry-level buyers will see this drop in mortgage rates as a chance to get back into the market, even though they may still have to settle for a slightly smaller house (or fewer upgrade options) than before.

The Year-End Plunge in Housing Starts

The seasonally-adjusted annual rate of single-family housing starts plunged 6.7% in December from November, according to data released on Feb. 26 by the Commerce Dept. December single-family starts were also down 10.5% vs. the prior year.



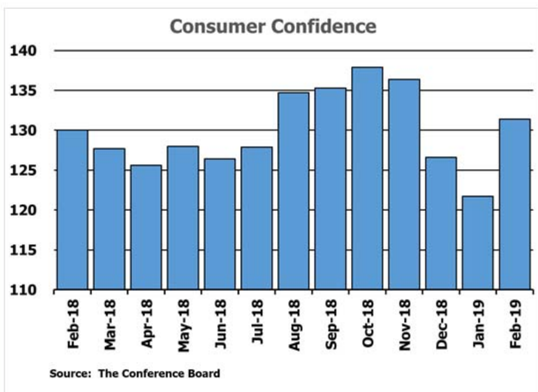
(The Commerce Dept. is still behind on its data releases as a result of the shutdown of the Federal government in January. It says that the December 2018 housing construction report released earlier this week already includes some of the late reports and corrections that normally would be contained in subsequent revisions. However, it also noted that the reporting delays might make it more difficult to determine the exact start and completion dates for homes under construction. The Commerce Dept. does not expect to become current on its reports until May.)

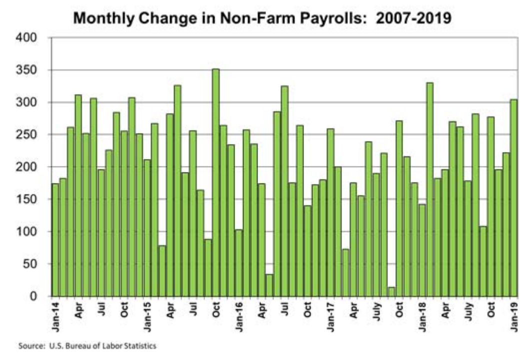
The drop in single-family starts was most likely a response to sharply slowing sales during the months of November and December. Despite the decline in starts, there were 510,200 single-family homes under construction at 2018 year-end, up 7.1% from 2017 and the number of single-family permits not yet started at year-end was up 18% over 2017 to 90,500 units. Builders apparently thought that they had sufficient product in the works to handle anticipated spring demand.

Yet, there are early signs that housing demand is on the upswing. The National Association of Realtors reported last week that its Pending Home Sales index (which measures signed contracts) jumped 4.6% in January on a seasonally-adjusted annual basis vs. December. Lawrence Yun, NAR's Chief Economist, attributed the improvement to the pause in Fed rate hikes and the reopening of the federal government after the shutdown. He anticipates that buyers will come back into the market to take advantage of lower mortgage rates.

Although there have been concerns about a potential slowdown in the economy as a result of higher interest rates and the possibility of a trade war with China, the economy appears to be holding up reasonably well. Real GDP growth for the 2018 fourth quarter was clocked at a respectable 2.6%. Likewise, industrial production was up 3.8% in January vs. the prior year.

Two economic indicators that have a more direct impact on housing demand are still flashing positive signs. Job growth has remained strong and remarkably consistent. The economy added an average of 220,000 jobs per month during 2018 (and 216,000 per month since 2014). Consumer confidence rebounded in February and is now back above the February 2017 level (which ushered in last year's especially strong spring selling season).

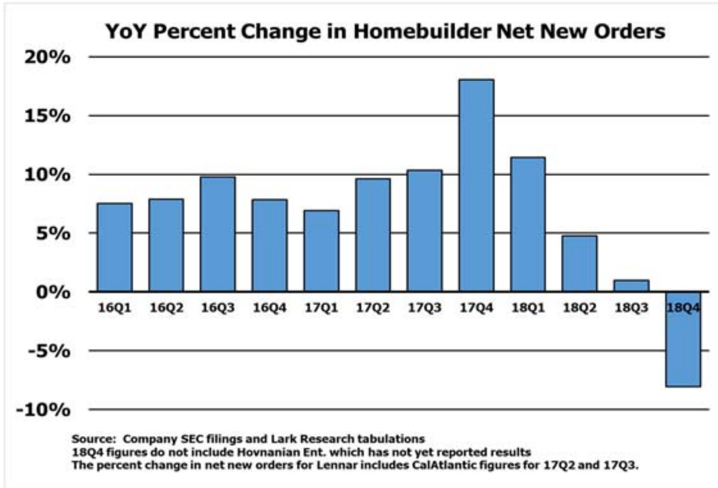




Homebuilder 18Q4 Results: Strong Profits, Weak Orders, but Signs of Improvement.

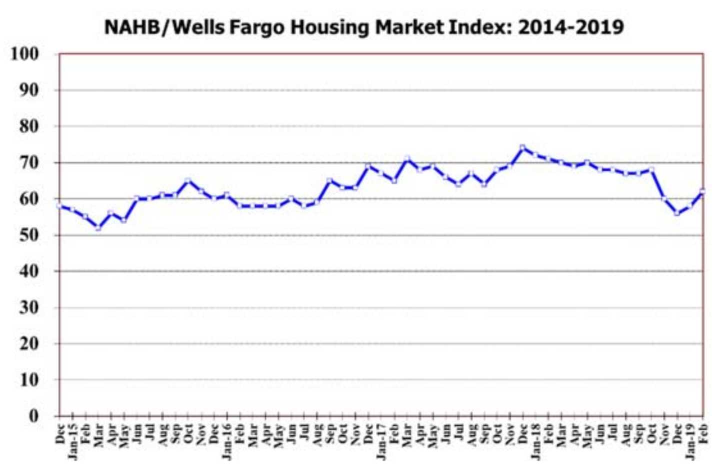
As a group, the homebuilders reported very strong results for the 2018 fourth quarter. Revenues were up nearly 12% on average, with closings up more than 9% and average prices up 2%. Earnings, on average, were up 75%, with five of 10 builders reporting earnings that doubled vs. the prior year. While some of the profit improvement was related to changes associated with the Tax Cuts and Jobs Act, it is clear that the operating leverage in homebuilding helped the builders deliver strong double-digit earnings growth in the quarter.

Current earnings are obviously important, but investors are more concerned about the outlook for future earnings, especially in light of this year's slowdown in housing production activity.



New orders for 10 of the 11 homebuilders that I track who have reported so far fell 9.7% in the 2018 fourth quarter vs. prior year levels. This was the first collective quarterly decline in orders experienced by the group in years. Although the demand environment has clearly become challenging, most builders have been emphasizing actions that they have taken over the past year or so to strengthen their operations and position them to compete more effectively, especially by expanding their offerings of affordable homes.

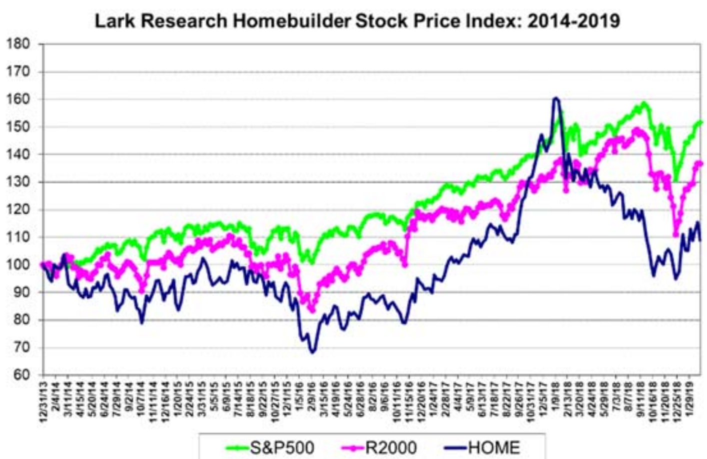
Despite that drop in fourth quarter new orders, there were some signs that 2019 first quarter orders in the 2019 first quarter are on the upswing, helped by the decline in mortgage rates. Besides the jump in January pending home sales (discussed above), the NAHB/Wells Fargo Housing Market Index (HMI), a measure of homebuilder sentiment about current and anticipated future sales, rebounded in January and February. All three components of the HMI – the current sales pace, expected sales pace six months out and current buyer traffic – showed solid improvement in February.



Toll Brothers, which reported this week that unit orders in its fiscal 2019 first quarter (ended January 31) fell 24.3%, said that the rate of decline in orders eased steadily as the quarter progressed. Although its contract deposits taken during the month of February were down from a year ago, deposits taken for the most recent week were up vs. the prior year.

All of this suggests that 2019 first quarter orders should be less negative than the fiscal 2018 fourth quarter than many analysts and investors fear.

The rebound in January pending home sales and the HMI combined with the anecdotal evidence from Toll Brothers foreshadow a better-than-expected spring selling season for the housing market. This is also reflected in the rebound in homebuilding stocks that has taken place over the past few weeks, reversing the sharp downtrend that was evident for virtually all of 2018. (As noted in my previous housing update[1], that rebound in homebuilding stocks preceded the rebound in the broader market.). Year-to-date, through Mar. 1, the Lark Research Homebuilder Stock Price Index has gained 11.7%, in line with the S&P 500's 11.8% advance, but behind the Russell 2000's 17.9% gain.



Those year-to-date results incorporate last week's sharp sell-off in homebuilding stocks. For the week ended Mar. 3, my Homebuilder Stock Index fell 5.6% against a broader market that was flat to up slightly. The decline in homebuilding stocks was almost certainly due to the jump in Treasury yields (and perhaps by the plunge in 19Q1 orders for Toll Brothers) and also possibly by a bit of profit taking after the recent advance.

Yields on Treasury Notes and Bonds rose across the two-year to 30-year maturity spectrum. The 10-year yield increased by 11 bp from 2.65% (on Feb. 22) to 2.76%, its highest level since late January. As noted above, given the long-term historical spread of 175 bp between the 10-year yield and 30-year mortgage rates, we should expect to see the average Freddie Mac mortgage rate climb from 4.35% in the last reading on Feb. 28 to around 4.50% next week.

The Wall St. Journal reported on Saturday[2] that the rise in U.S. Treasury yields followed similar increases in sovereign yields in Europe. While that may be true, it is not a satisfying explanation. Perhaps the linkage is due to the hedging practices of global fixed income investors. Alternatively, U.S. bond investors may have become worried that the sell-off in

[1] http://www.larkresearch.com/2018/12/09/the-pause-that-refreshes-the-homebuilders/
[2] https://www.wsj.com/articles/u-s-government-bonds-fall-in-sync-with-europe-11551460736

Europe might give the Fed additional room to raise short-term rates. Yet, short-term rates out to one year were flat on the week. Even if European investors are worried about future ECB moves, a rate hike still looks like it may be months away or more. Euribor has been mostly flat this year, while U.S. Libor has fallen 20 bps to 2.60% and was down again last week. Although homebuilding stocks fell sharply last week, homebuilding bonds posted modest gains, in line with the broader high yield market. Consequently, last week's Treasury bond sell-off looks like an overreaction to me, but I cannot of course take it for granted.

Despite this week's sell-off in homebuilding stocks, this latest rebound looks like it has legs. Even after the recent bounce, the average homebuilder stock, according to my calculations, is trading at only 9.0 times consensus 2019 estimates and 8.4 times (consensus) projected 2020 earnings. Those estimates anticipate that earnings will fall 8.5% in 2019 but rebound 7.7% in 2020. If the 2019 spring selling season is better-than-anticipated, as I expect, both earnings estimates and forward P/E multiples will likely rise.

Except for last week's performance divergence, homebuilder bonds have mirrored much of the performance of homebuilding stocks over the past year, but with substantially less volatility.

ICE/BofAML's U.S. High Yield Homebuilder and Real Estate Bond Index

As its name implies, the ICE/BofAML U.S. High Yield Homebuilder and Real Estate Bond Index is not just a homebuilder index. According to its fact sheet, the Index has 71 building and construction bonds, with a total fair value of $28.3 billion and 24 real estate bonds (development & management and REITs) worth $12.9 billion, as of Feb. 27.

Using company SEC disclosures and TRACE trading data, I have developed a database of 77 homebuilder bonds with total amounts outstanding of $27.2 billion and a total fair market value of $26.9 billion, as of Feb. 22. At that date, the portfolio had an average "yield-to-worst" (i.e. the lower of the yield-to-call or yield-to-maturity) of 5.8% and an average spread vs. Treasurys of 328 bp. Its weighted average credit rating was a touch over Ba2/BB.

Since the end of 2017, I have also tracked a mini-portfolio of homebuilder bonds consisting of the following:

Lark Research Homebuilder Bond Mini-Index
Components

Builder	CUSIP	Amount Outstanding	Coupon Rate	Maturity
D.R. Horton	23331ABK4	500.0	4.00%	15-Feb-20
KB Home	48666KAT6	450.0	7.00%	15-Dec-21
Lennar	526057BZ6	650.0	4.50%	30-Apr-24
MDC Holdings	552676AQ1	500.0	6.00%	15-Jan-43
NVR	62944TAE5	600.0	3.95%	15-Sep-22
PulteGroup	745867AW1	700.0	5.50%	1-Mar-26
Toll Brothers	88947EAN0	400.0	4.37%	15-Apr-23

Compared with the universe of homebuilder bonds, this Mini-Index has a higher credit rating, averaging between Ba1/BB+ and Baa3/BBB-. (Two of the bonds – the D.R. Horton 4s of ’20 and the NVR 3.95s of ’22 - are investment-grade rated (Baa3/BBB and Baa2/BBB+, respectively). Another three – the Lennar 4.5s of ’24, PulteGroup 5.5s of ‘26 and Toll Brothers 4.37s of ’23 - are Ba1/BB+ rated.

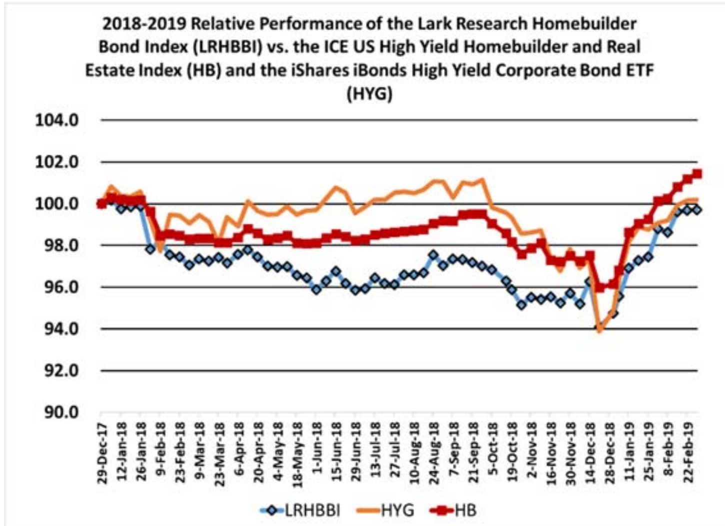
This portfolio has underperformed both its peer group and the broader high yield market, primarily because longer maturities of two of the bonds – the PulteGroup 5.5s of ’26 and especially the MDC Holdings 6s of ’43. Thus, this Index has a higher duration of 4.71 years vs. the homebuilder bond universe of 4.06 years.

During this recent period of underperformance for the homebuilder bonds, it is the longer-dated bonds that sold off the most and have not as yet rallied sufficiently to make up for those losses. Thus, those longer bonds trade at a wider spread than both the homebuilder universe and especially compared to the spreads that they carried at the end of 2017.

The MDC and PulteGroup bonds, for example, traded on Mar. 1 at spreads of 88 bp and 105 bp, respectively, above their spreads at the end of 2017. That compared with an average spread differential of only 22 bp on the remaining five bonds in the Index.

Although I have not performed a similar analysis across the homebuilder bond and broader high yield universes, this relative differential performance probably extends across the high yield sector. ICE/BofAML’s U.S. High Yield Master Index’s current spread is 23 bp spread above its year-end 2017 level, but a 0-5 year maturity subset of that Index is trading at a 31 basis point lower spread.

Accordingly, investors looking to outperform the broader high yield market (assuming that it continues to advance) should consider longer-dated bonds. Of course, these bonds carry both greater interest rate risk and greater credit risk (since they are essentially a longer-term bet on the strength of the U.S. economy or housing market, as the case may be).



The decline in yield spread in the 0-5 year maturities is due in part to increases in U.S. Treasury yields as a result of Fed interest rate policy normalization. Since the end of 2017, the one-year Treasury yield has increased 46 bp, two-year 28 bp; and 3-year 15 bp, but the 5-year through 10-year yields are essentially unchanged.

Credit Considerations for High Yield Homebuilder Bonds

As noted above, homebuilder bonds are rated below investment grade in the BB range. The industry is cyclical; credit rating agencies consider financial flexibility as an important counterweight to the risk of deteriorating financial performance on the downside of the housing cycle.

In very general terms, here are the parameters for three financial metrics that help determine credit ratings:

General Parameters for Three Key Financial Metrics that Help Determine Credit Ratings for U.S. Homebuilders

	Debt-to-total capitalization	Interest Coverage	Capitalized Interest as a % of Inventories
BBB	25%-35%	10.0X+	<3.0%
BB	35%-50%	5.0x-10.0X	3.0%-6.0%
B	50%-60%	2.0X-5.0X	6.0%-9.0%
CCC	>60%	<2.0X	>9.0%

Source: Lark Research estimates based upon an analysis of homebuilder financial metrics

The publicly-traded homebuilders appear to be in much stronger financial shape today than they were in the lead up to the 2007 housing collapse. Back then, inventories grew at a rapid pace, requiring a use of cash that greatly exceeding cash flow generated from operations to meet growing and expected future demand. As a result, average debt levels for most homebuilders increased steadily through the 2006 peak. Shortly thereafter, the builders began to record significant inventory write-downs that reduced their equity book values, taking debt-to-cap ratios even higher. A year past the 2008 financial crisis, the average builder debt-to-cap ratio was around 56%. Today, excluding Hovnanian, the average debt-to-cap ratio is 43%.

This time around, builder balance sheets are stronger, with much less debt. Lower debt and lower average interest rates on that debt translate into lower debt service costs; so current profits provide more of a cushion against debt service requirements. (i.e. interest coverage ratios are higher). Despite the steady growth of sales over the past few years, most builders are generating positive cash flow from operating activities (after inventory growth). Builders have been increasing their footprints by expanding the number of active communities that they operate; but the rate of expansion has been much more modest this time around, which should give them greater flexibility to adjust to a potential slowdown in demand.

Bubble Trouble?

There has been some discussion over the past few years about whether the housing market is currently in a bubble. Based upon single-family housing production levels, which are still less than 50% of 2005 peak levels, the answer is no. Builders do not appear to be anywhere near as overextended as they were twelve years ago. Mortgage delinquency rates are near record lows, so the risk of a sharp pullback in mortgage lending also seems low.

However, house prices – which are now 12% above 2006 peak levels, according to S&P/Case-Shiller – are arguably in a bubble as a consequence of the record low mortgage rates triggered by the Federal Reserve's accommodative monetary policies. Since 2010, house prices have risen at an average annual pace of 4.8%, well above the average annual inflation rate (as measured by headline CPI) of 1.8%. The sharp rise in real home prices has crimped housing affordability, making it more difficult especially for entry level buyers to purchase a home. The sharp drop in housing demand in the second half of 2018 as mortgage rates began to approach 5.0% highlights the near-term dependency of housing demand on low mortgage rates.

The consequences of the house price bubble may not be devastating to the housing market; but if interest rates do rise gradually from current levels, there will most likely have to be a process of adjustment to allow buyers to raise their incomes and save more for a downpayment in order to qualify for the homes that they want. Part of the increase in the debt burden may also be absorbed by the sellers of homes in the form of lower house prices (or future increases in prices that are below the rate of inflation). Homebuilders, the sellers of new homes, may also help facilitate this adjustment by reconfiguring their product offerings or paying less for land.

While a repeat of the 2006 housing bust is highly unlikely, it is possible that housing could suffer a significant cyclical decline as a consequence of a longer-lasting global recession. In 2008, the U.S. economy escaped a deeper and longer economic recession as a result of the Federal Reserve's moves to flood the financial system with liquidity. Although it is clear that the financial system is in better shape now, debt levels have remained high (or in some sectors, gone higher), which may make it more difficult now for the Federal Reserve and other central banks around the world to respond similarly to the next systemic challenge.

For now, though, U.S. housing has entered what should be a solid spring selling season. In the absence of a specific catalyst that sparks a downturn, it is likely that the U.S. economy will continue to plow forward at a modest pace. In that case, the housing sector should be able to adjust over time to the challenges presented by gradual increases in interest rates. In this environment, while equity investors are concerned with earnings growth, bondholders should not have to worry about receiving their coupons for at least the next few years or longer.

Summary and Conclusion

Stronger than expected performance in 2019 should help long-maturity homebuilder bonds to outperform, which would result in their yield spreads returning closer to 2017 year-end levels. My Mini-Index, as described above, offers two longer-maturity bonds – The MDC Holdings 6.0% Senior Notes due 2043 and the PulteGroup 5.5% Senior Notes due 2026, which fit this profile.

In fact, I believe that the Mini-Index itself is attractive at current price levels (except for the D.R. Horton 4.0% Senior Notes of 2020, whose short maturity makes a purchase impractical). The Mini-Index has a good balance between its relatively higher credit rating profile and slightly longer duration than the homebuilder high yield universe. At current prices, it offers an average YTW of 4.62%, an average spread of 197 bp and average duration of about 4.7 years.

Investors looking primarily to minimize interest rate risk should still consider shorter maturity homebuilding bonds with maturities of say 3-5 years. Ba/BB-rated homebuilder bonds in that maturity range currently offer an average YTW around 4.75%, 220 bp above Treasurys.